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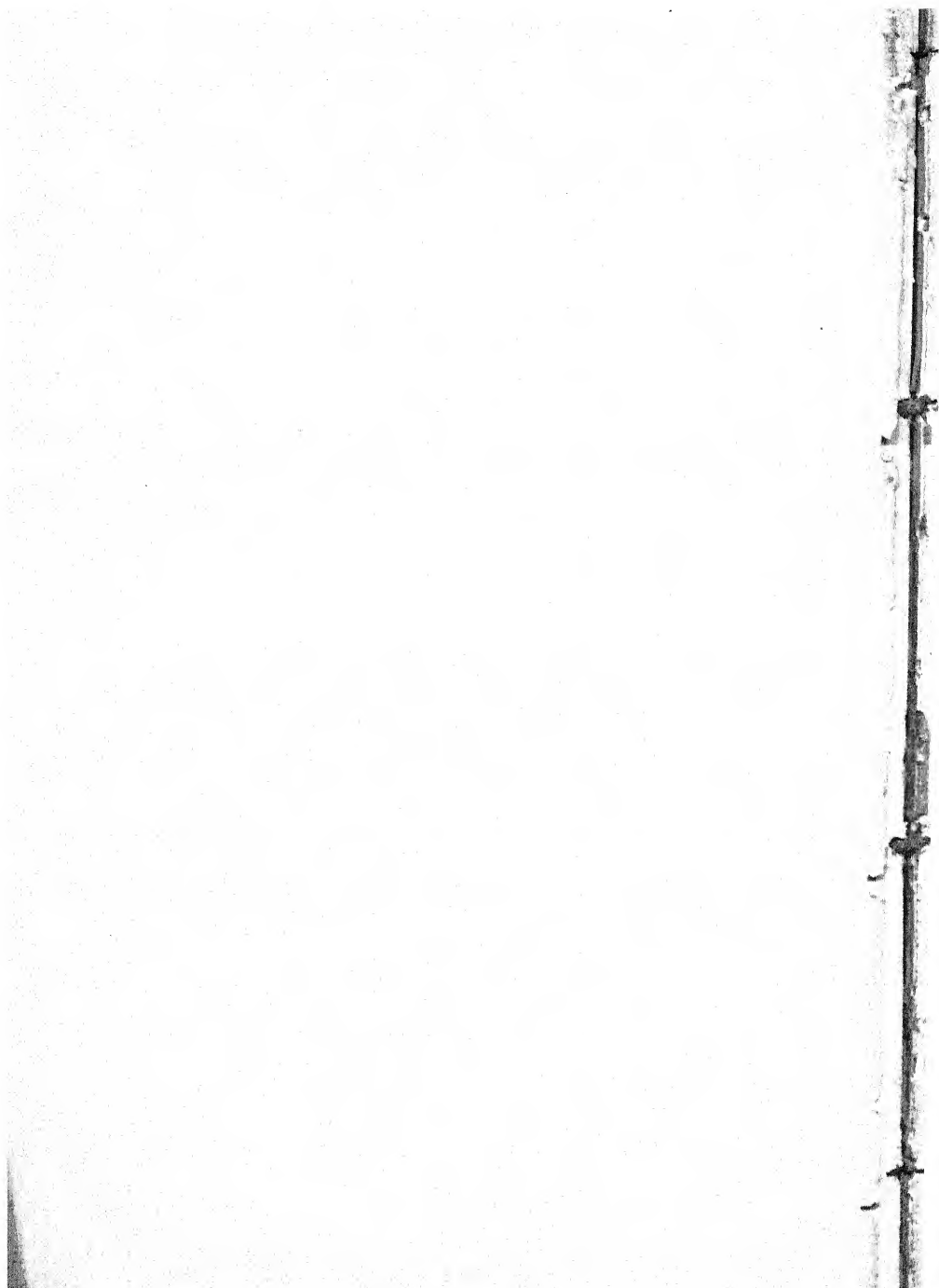
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PROCEEDINGS OF THE SOCIETY.

LIST OF FELLOWS.



I.

SOME FURTHER UNPUBLISHED ROMAN
BRONZE COINS IN MY COLLECTION.



1



2



3



4

SINCE writing the short paper on some unpublished Roman bronze coins in my collection, which I contributed to the *Num. Chron.*, Ser. V, vol. vi, 1926, I have been fortunate in acquiring a few further pieces which I shall now describe.

1. GALBA. As.

Obv. SER GALBA IMP CAES AVG TR P
Laureate head to r.

Rev. EX S C OB CIVES SER in four lines within
an oak-wreath.

166.5 gr. (10.79 gm.).

This is a new reverse for a "Second Brass", although it is already known on a scarce sestertius (B.M.C., *Empire*, i, p. 318, no. 62; Mattingly and Sydenham, vol. i, p. 202, no. 29). It is not quite certain whether the coin, which is rather heavily patinated, is a dupondius or an as; probably it is the latter.

2. GALBA. As.

Obv. IMP SER SVLP GALBA CAES AVG TR P
Laureate bust to l.

Rev. CERES AVGVSTA S C Ceres seated to l.
holding corn-ears (or poppy-heads?) and a caduceus.¹

150.8 (9.90). Cp. B.M.C., *Empire*, i, p. 141; M. and S., i, p. 204, no. 52. (Fig. 1.)

This is a new obverse and an addition to the large number of varieties of obverse on coins of Galba.

3. TITUS. Sestertius.

Obv. IMP TITVS CAES VESP AVG P M TR P
COS VII Laureate bust to r.

Rev. S C Spes advancing l., holding flower in r.
hand and raising robe with l.

397.2 (25.73). Cp. B.M.C., *Empire*, ii, p. 293.
(Fig. 2.)

This piece is carefully struck on a large and almost perfectly circular flan, the bust of the Emperor being in high relief.

¹ On another coin in my collection (M. and S., No. 52) the variety of detail, poppy-heads for corn-ears, appears.

The bronze coins of Titus which bear his name in full are undoubtedly rare and appear to be confined to those struck during his seventh consulate. Messrs. Mattingly and Sydenham give two varieties of sestertii only with this obverse, and no dupondii or asses. In view of the fine workmanship of this coin and the rarity of these particular pieces, one might suppose that they were a special limited issue struck at the time of the emperor's accession; they are attributed in the British Museum Catalogue to the mint of Lugdunum. Gold and silver with the name of Titus in full are normal, and it is somewhat surprising that the large issue of bronze which was made in the succeeding year (A.D. 80) contains no specimen with this form of obverse.

4. VESPASIAN. Quadrans.

Obv. IMP VE[SPAS]IAN AVG A globe and rudder.

Rev. S C in laurel wreath.

44.4 (2.86). Unpublished.

5. Quadrans.

Obv. An owl to l. with head facing.

Rev. S C l. and r. of an olive branch.

42.4 (2.75). Unpublished.

As both the obverse and reverse of this coin are common types on the inscribed coins of Domitian, I would attribute this piece to the same period.

6. JULIA, daughter of Titus. As (?).

Obv. IVLIA IMP T AVG F AVGVSTA Bust of Julia to r., draped, hair knotted at back with an elaborate mass in front above forehead.

Rev. VESTA S C Vesta seated l., holding palladium in r. hand and sceptre in l.

Copper (?). 168.7 (10.93). Cp. B.M.C., *Empire*, ii, p. 297, no. 256; M. and S., ii, p. 140, no. 180.

From the metal and weight of this coin there is little doubt of its being an as. No coin of similar denomination struck for this princess has hitherto been recorded, but this does not preclude the possibility of further specimens being in existence. Cohen does not differentiate between dupondii and asses and in many cases it is impossible to distinguish between these two denominations except by weight. All the specimens described by Mr. Mattingly in *Coins of the Roman Empire in the British Museum* (vol. ii, p. 278-9) are dupondii.

7. DOMITIAN. As.

Obv. . . . CAES DOMIT XI C P MAX TR
P P P Laureate bust to r.

Rev. [FORTVNA] AVGVSTI Fortune standing
to l., holding rudder and cornucopiae; in field S C.

Cp. B.M.C., *Empire*, ii, p. 347, no. 5; M. and S., ii,
p. 192, no. 299.

This is an interesting piece from the fact that it has been overstruck on another coin, in all probability on an as of Nero of the Lugdunum mint. Distinct traces of the former inscription, e.g. NE[RO] CAESAR, are legible, whilst the concluding portion of the legend P MAX, &c., which is almost exclusively confined to coins of Nero, does not appear to have been affected by the overstriking.

There is no trace of the former type on the reverse: it may well have been the common reverse of Victory with a shield. Cp. B.M.C., *Empire*, i, p. 275, no. 381 ff.; M. and S., i, p. 167, no. 329.

8. NERVA. As.

Obv. IMP NERVA CAES AVG P M TR P COS
II DESIGN III P P Laureate head to r.

Rev. CONCORDIA EXERCITVVM S C Two
r. hands clasped.

174.2 (11.29). Cp. M. and S., ii, p. 228, no. 79.

9. HADRIAN. As.

Obv. HADRIANVS AVG COS III P P Laureate
and draped bust to l.

Rev. FELICITAS AVG S C Emperor standing to
r. clasping hands with Felicity.

178.3 (11.55). Cp. M. and S., ii, p. 442, no. 805.

10. CARACALLA. As.

Obv. ANTONINVS PIVS AVG Laureate head to r.

Rev. PONTIF TR P XI COS III In ex. PROF
AVGG, in field S C. Caracalla on horseback to l.
casting a javelin at an enemy prostrate at his feet.

163.3 (10.58). Variety of C. 517. The date of this
coin (A.D. 208) leaves little reason to doubt that the
reverse refers to the departure of Caracalla with his
father for the campaign in Britain.

11. ELAGABALUS. Sestertius.

Obv. IMP CAES M AVR ANTONINVS PIVS
AVG Laureate head with draped and cuirassed
bust to r. and short beard.

Rev. LIBERTAS AVG S C Libertas standing to l.,
holding cap and cornucopiae; in field l. a star.

239.5 (15.52). Variety of C. 107.

The majority of the following antoniniani of
Carausius are minor varieties of Webb (*The Reign and
Coinage of Carausius*, 1908).

1. *Obv.* IMP C CARAVSIVS P F AVG Radiate and
draped bust to r.

Rev. CONCORD MILIT Two hands clasped; in
field S C, in exer. C.

52.6 (3.41). Variety of Webb 252.

2. *Obv.* IMP CARAVSIVS P AVG Radiate and draped bust to r.

Rev. LEG XXX VLPIA VI Neptune standing to l., holding a dolphin in his r. hand and a trident in his l.

47-8 (3-10). Variety of Webb 110.

3. *Obv.* Similar to no. 2.

Rev. [MARS] VIC[TOR] Mars standing to r., holding in his r. hand a long spear and his l. resting on a shield.

53-5 (3-47). Not in Webb. (Fig. 4.)

4. *Obv.* IMP C CARAVSIVS P F AV Radiate and draped bust to r.

Rev. PAX AVG Pax standing to l., holding in her r. hand an olive branch, in her l. a sceptre; no letters in field or ex.

65-5 (4-24). Variety of Webb 998. (Fig. 3.)

5. *Obv.* IMP C CARAVSIVS P F I AVG Radiate and draped bust to r.

Rev. PROVID AVGGG Providentia standing to l., holding a globe in her r. hand and a sceptre transversely in her l.; in field S P, in ex. C.

70-00 (4-53). Variety of Webb 428.

6. *Obv.* IMP C CARAVSIVS P AVG Radiate and draped bust to r.

Rev. SPES PVBL Spes standing to l., holding flower in r. hand and raising robe; in field S P.

65-2 (4-22). Variety of Webb 571.

7. *Obv.* CARAV Radiate and draped bust to r.

Rev. VICTORIA AVGG Victory advancing to l., holding a wreath and a palm-branch; no letters in field or ex.

45-4 (2-94). Not in Webb.

This is a curious piece and appears to have been overstruck, at any rate so far as the obverse is concerned, on an antoninianus of an earlier emperor. The reverse shows no sign of overstriking and, judging from the reverse inscription, I consider that the coin was originally an antoninianus of Tetricus.

8. In the name of MAXIMIANUS.

Obv. IMP C MAXIMIANVS P F AVG Radiate and cuirassed bust to r.

Rev SALVS AVGGG Salus standing to r., feeding a serpent; in field S P, in ex. MLXXI.

67.2 (4.35). This reverse is only known on a rare aureus. (Webb 1252.)

9. DECENTIVS. "Second Brass."

Obv. DECENTIVS CAESAR Bare head with draped bust to r.

Rev. Within a wreath ✱ between A and ω; outside the wreath portions of the usual legend SALVS D D N N AVG ET CAES.

88.1 (5.71).

This variety was unknown to Mr. Hugh Goodacre (*The Bronze Coinage of the late Roman Empire*). Presumably half-barbarous.

LEOPOLD G. P. MESSENGER.

II.

A ROSE-MARKED POUND OF QUEEN ELIZABETH.



In the Ashmolean Museum, Oxford, there is preserved the earliest gold pound piece of Queen Elizabeth. Here is a description of this rare and perhaps unique coin :

Obv. (A rose) ELIZABETH : D' G' ANG' FRAN' ET :
HIB' REGINA .

The Queen's crowned bust with flowing hair to the left; she wears a "pinked" gown and a small ruff. The bust does not extend to the edge of the coin.

Rev. · IHS' AVTEM : TRANS' PER : MEDIV' ILLOR'
IBAT · (a rose).

A crowned and garnished shield bearing the royal arms and dividing the letters E R.

Wt. 173·3 grains (grammes 11·23).

The rose as privy mark indicates the year 1565.

The Oxford collection of coins is the oldest public collection in England. It was originated by Archbishop Laud's gift of coins in 1636. The piece above

described was formerly in the possession of Thomas Knight of Godmersham in Kent.

He bequeathed his fine collection of medals, and his series of English coins, to the University of Oxford.¹

In 1795 the bequest was received. In MS. Catalogues in the Ashmolean Museum there are two references to this rose-marked pound. The first is contained in a MS. entitled "A Catalogue of my English and foreign Coins and Medals". Inside the cover of this book is written the following note:—"N.B. This Catalogue was taken by Mr. Pegge; when the respective Articles of it form'd Mr. Barret's Collection, of Lee, near Canterbury (Father of the present Gentleman now resident there) on whose Death almost all the said Articles were dispos'd of, and the Coins and Medals were purchas'd by Mr. Knight of Godmersham—Kent." The coin is catalogued on page 13 as:—No. 29. Sovereign, 7 dwts. 3 grs.

The slight inaccuracy in weight was probably caused by inefficient scales.

The second reference occurs in a MS. Catalogue entitled "A Catalogue of British and Saxon Coins also of English Gold and Silver". This Catalogue is written in Canon Pegge's handwriting, and on fol. 44 *verso* under Elizabethan Gold the coin is described as a sovereign of 20s. "without $\frac{1}{2}$ inner circle, rare". Apparently this Catalogue was prepared by Pegge for Thomas Knight, the donor of the collection to which the coin belongs.

Actually the coin was first published by Martin Folkes in the plates which he caused to be prepared to

¹ *Gent. Mag.*, p. 1148.

illustrate the *Tables of English Coins*. The *Tables* became the standard work in its day, and the earliest undated volume of plates made to accompany the text was probably published about the year 1745.

There is little doubt that Folkes's engraving was taken from the actual coin in question. A close inspection of the engraving and a comparison of it with the coin reveals that the positions of designs and legends and their relationship to each other are the same in both. There are, however, two discrepancies to be accounted for in Folkes's engraving. First he shows a faint-line inner circle quite close to the legend, traces of which are visible on the coin and are clearly the remains of a guide-line used by the die-sinker to keep the letters in a circle. This is sufficiently clear on the coin to explain the error. The second difference is that Folkes gives a senseless piece of punctuation in the middle of the abbreviation 'TRANS' making it read 'TRA · NS'. This is a mistake. There is a slight division of the letters on the coin but they are not separated by any punctuation mark.

It is interesting to note that Samuel Pegge, the writer of these MS. Catalogues, and Martin Folkes were contemporaries. Both of them were distinguished numismatic authors and fellows of the Society of Antiquaries. They would certainly, therefore, be acquainted, and let us hope friends. Between 1731 and 1751 Pegge, who was vicar of Godmersham, Kent, must have known Knight, then the owner of this coin, for he also resided at Godmersham. It was during these years that Folkes's first edition of the plates for the *Tables* appeared. From this one may venture to assume that Pegge drew Folkes's attention to Knight's coin, thus

giving external evidence for the fact that Folkes's engraving was taken from the actual specimen now under discussion.²

Let us now consider the issues of sovereigns in Queen Elizabeth's reign. It will be remembered that by her first indenture to the mint authorities in 1558 she ordered a double series of gold coins to be minted in fine gold and crown gold. Of these series fine sovereigns exist in fairly plentiful numbers, but according to the pyx trial of 24th October 1561 only £10 10s. of crown gold coins were issued, and though the pound piece was specified no example of it has hitherto appeared to survive.³ Of the crown gold issues extending from 1565 to 1571 it would seem, to be sure, that the specimen now under discussion is the only one known. Its position in the history of English coinage will be noticed if we recall the history of the denomination, or rather its origin. This begins with the debasement of the gold coinage by Henry VIII in the issue of 1545 to 1547, when the quality of gold was made to sink to 20 carats and the weight of the sovereign to 192 grains. In Edward VI's issue of 1549 to 1550 the quality of gold was raised to 22 carats, but the weight of the sovereign fell to 169 $\frac{7}{17}$ grains. It was upon the half-sovereigns of this issue that the royal bust for the first time appears on the obverse of the gold coinage. In 1550 to 1553 a twenty-shilling sovereign was issued of 174 $\frac{6}{11}$ grains and

² The coin is also referred to by Kenyon, p. 124, who gives a description from Ruding, Pl. X. 11. Ruding's plates are taken directly from Folkes, and Kenyon, who describes the coin as "very rare", incorporates Folkes's two inaccuracies in his account of this coin.

³ *Num. Chron.*, 1916, p. 99.

22 carat gold, bearing the king's half-length figure. This piece, issued contemporaneously with a new fine sovereign ordered in 1551, was the direct ancestor of Elizabeth's first pound piece. At this stage begins the curious custom of maintaining a dual system of gold coinage which obtained until the end of the reign of James I and in standard did not entirely die out until the last angel was coined under Charles I. Upon the death of Edward VI, Queen Mary I, as might be expected, maintained medieval principles in minting as in other respects. She issued only the great double ryals or sovereigns and angels together with a very rare ryal. The appearance, therefore, of the pound at the beginning of Elizabeth's reign is but the evidence of a renewed contest between the ancient and modern. A similar struggle is observable in the silver coinage, but here it was really short-lived, and the groat soon gave way to the shilling and its divisions. The old gold system, however, was tenacious. There were heavy issues of fine sovereigns later on, as well as at the beginning of the reign, together with prolific coinages of angels of the same standard, passing current as a third of the greater denomination. Of ryals there were but a few, and a certain mystery still shrouds these quaint coins. At an early period there is an ominous sign for this old standard in the plentiful issues of gold half-pounds which appear to have circulated side by side with the angel, each coin being at the value of ten shillings and probably constituting the main gold currency at this epoch. In 1571 for a period of over twenty years (till 1593) there is a cessation of the half-pound issue, leaving the field open for the old system. At last in 1593 a dramatic

change sets in; the familiar pound of Elizabeth's later years becomes a permanent feature of the currency and its main medium.

Let us now turn our attention to the actual coin before us. It appears to be a unique specimen. To be sure, this makes it difficult to conceive of its representing an issue put into general circulation. There is also a certain singularity in the style of the coin. Perhaps it is a pattern. On the other hand, there are coins equally or nearly as rare that were of currency; such for example as the crown of the rose of Henry VIII or his half George noble. However, this pound piece fills so desirably a lacuna in the Elizabethan series that one may venture to regard it as of definite authorization; an example at least for a coinage intended to be put into currency but which in the end never materialized. From the point of view of its style the piece is finely conceived and originally designed. It is the first coin of so large a size to bear the royal portrait bust on its obverse. This fact gives it a special interest. The type is quite unlike the rose-marked half-pound of currency, being much more modern for the period. The absence of the beaded inner circle gives a breadth and simplicity which is lacking in other hammered portrait coins of Queen Elizabeth, so that at first sight it might be taken for a mill coin.

The portrait could be compared with that on the mill half-pounds and the sixpences of 1567-8. The restraint of the design is in marked contrast with the elaborate portraiture of the later issues of gold pounds. Perhaps it was thought that the style presented too great an innovation to be put into general circulation

at this early period, though it appears to have been designed for this purpose.

The retention of the *Ihs autem* legend on the reverse of this coin is accounted for by the ancestry of the denomination from the third period of Edward VI's coinage. It is one of the last appearances of this historic legend, which ends entirely with the Elizabethan ryals.

My grateful thanks are due to the Keeper of the Ashmolean Museum for permission to publish this coin.

ARNOLD MALLINSON.

III.

THE COINAGE OF EDWARD III FROM 1351.

PART IV.

1362-1377 (Treaty and post-Treaty Periods).

[SEE PLATES XVII (I)—XXV (IX).]

THE coins to be described in this section include all those issued subsequent to 1361, but before treating of these, two omissions must be rectified, both referring to the transitional treaty coins. The quarter-noble described in the earlier part as a/4 has a lis over the lion in the lower right-hand quarter; it is illustrated on PL. XVI (XII). 5. The other omission is the half-penny of the same period, two of which are now known. The obverse reads EDW TROVS REX AN, no stops; pellets in the upper angles of the initial cross. The bust shows drapery. Reverse, CIVITAS LONDON, no stops or other marks.

The coins issued in accordance with the Treaty of Brétigni, which were at first of a transitional character, were replaced after a period of six months by a second issue. The old transitional dies and punches were evidently scrapped, as the only mule we have is of a Durham penny. The new dies were very well made, and the coins of London and Calais are well struck and well centred. The letter punches, too, are new, and we get forms which had not occurred before, such as the letter X which is commonly seen on the silver coins, and the X of curule shape (X) which is borne

by nearly all examples of the gold issues, but rarely occurs on the silver [Pl. XXI (V). 3 and 6].

The types of the coins are unchanged except for some small details. The trefoils round the central compartment on the gold show a return to the regular type, which had been replaced during the transitional period by annulets or pellets. The lis above the lion in the quarter, a constant feature, is now done away with. The ship ornaments, lion and lis, have the lion to the right, the opposite of what had been before. The silver coins also return to an earlier type without annulets on the tressure or by the side of the initial mark. The French title is of course removed from all the coins and, where there is room, there is added the title of Aquitaine or of Ireland or both. In this period we get a large issue of halfpennies. One farthing is known, of which the obverse certainly belongs to the treaty period [Pl. XXII (VI). 15]. All the regular gold and silver denominations were struck in large quantities. The mints are London, Calais, York, and Durham. The classification of these Treaty coins presents no great difficulty, as mules combining Treaty and post-Treaty issues are common in both the gold and the silver series, and consequently we know the latest issues of the Treaty coins. By a process of working backwards we are able to define the earlier groups. The mint accounts for silver coins show a gap from Sept. 30, 1365, to Sept. 29, 1367, a period of two years during which there was no coinage in London. Another help is to be found in the mint accounts by the fact that Calais is credited with silver from Feb. 20, 1363, to April 13, 1365, only, the second year only producing £389 11s. 1d. There is no gap in the gold coinage.

Of York and Durham there are no accounts available.

All the coins, both gold and silver, present but little variation. The workmanship during the whole of the period 1362 to 1369 appears to be the same. We must therefore have recourse to tiny details for the classification. Now the most important of these is the presence of an annulet before the king's name combined with a barred \overline{A} in one word of the reverse. This represents the latest issue on both gold and silver, as is evidenced by the use of an obverse or a reverse to produce a mule with the issues of the next period, the post-Treaty, 1369-77. The annulet is not a stop, for it occurs on gold coins which always have saltires as stops. It is always a single annulet, whereas when it occurs on the silver coins the stops are always two annulets colon-wise. The find of gold nobles at East Raynham and Dr. Brooke's valuable paper of description¹ have led to a complete classification of the gold of this period. Dr. Brooke places first the coins with a saltire before *Edward* on the obverse and an unbarred \overline{A} in *Ibat* on the reverse; then the variety just referred to with the annulet on the obverse and the barred \overline{A} in *Ibat*. The two series are united by sub-mules. Smaller varieties, such as the omission of a letter in the legends, must be referred to the lists, as they are of but little help in the classification. The silver agrees with the gold in the issue with the annulet and barred \overline{A} , but in the earlier issue the saltire is not found on the silver coins and no symbol takes its place before *Edward*. The \overline{A} of *adiutorem* is the distinctive letter on the reverse

¹ *Num. Chron.*, 1911, pp. 291 ff.

of groats and half-groats, and the A of *Civitas* on the pennies and half-pennies, while on the gold the second A of *Arguas* and the A of *Gloria* correspond, in half-nobles and quarter-nobles, with the A of *Ibat* on the nobles, determining by its barred or unbarred form the issue of the coin.

The lettering on the whole of the Treaty issues is the same on both gold and silver. The only variants are X, already referred to, and N. The Roman N appears at London only on the reverse of groats, half-groats, and farthings; the regular form is reversely barred, but the ordinary form and the unbarred form occasionally occur. On the pennies of London the obverse legend is always GDWTRD TRGL R DRS hVB; the reverse always has the letter N of the Lombardic form. The halfpennies have Lombardic N on the obverse; on the reverse the Lombardic form is always used on halfpennies, but the only known farthing has the Roman form. The latter coin may be a mule with post-Treaty reverse, but we cannot be quite certain in view of the occurrence of the same form of N on the obverses of the Durham and York pence and, in the word *London*, on groats and half-groats of the Treaty period.

The full lists of the gold coins contain many small varieties, but it may be noticed here that the earliest Calais nobles and half-nobles of the Treaty period use trefoils instead of saltires as stops at either side of *et* in the king's titles.

The lists also show a small series of nobles of London and Calais with a crescent on the forecastle, a feature likely to be missed if not looked for. This small group is important as it is a direct link with some post-Treaty

coins, which are identical except for the addition of the French title. The crescent is probably the privy mark in use just at the time the change took place, June 3 to 11, 1369.

The London gold coins require no further notice than is given to them in the lists, but there are a certain number of quarter-nobles which would not seem to fit into the series of London coins on account of the symbol in the centre of the reverse. These symbols are an annulet or a voided quatrefoil. The obverses bear above the shield a plain cross, or a cross in a circle, or a crescent. Dr. Brooke discussed these coins in his description of the East Raynham hoard, and tentatively assigned them to Calais, where they are now placed in the lists. The quatrefoil occurs on Calais nobles and half-nobles and on later post-Treaty Calais gold, but never on London gold. It is true that the same symbol is found on London and York pennies. The list of London quarter-nobles seems to leave no place for these pieces there. We have no evidence of any coinage at all at York except the archbishop's pennies. There seems, therefore, to be no alternative to their attribution to Calais.

The earliest Treaty groats have as stops double saltires on both sides; these are followed by an alteration on the reverse, where single saltires only are used between the words. The next issue has single annulets on the obverse combined with double saltires on the reverse. After this there are single annulets on obverse and single saltires on the reverse. A fifth variety has double annulets on the obverse and single saltires on the reverse. All these varieties are very uncommon. These give place to the commoner coins with double

annulets on the obverse and double saltires on the reverse; the double saltires or annulets are used always as stops between the words except either side of Σ on the obverse, and between POSVI and DEVS, where a single stop is used invariably on the obverse and usually on the reverse.

The half-groats all appear to have the same stops as this last group of groats. None are known with saltire obverses except mules with the post-Treaty issues. Stops on the pennies and halfpennies are only found on the obverse, and there double annulets or pellets occur. A mark, either a saltire or an annulet, commonly follows the syllable DON on the reverse. This is not a stop but part of a privy mark, and is associated with an unbarred \mathcal{T} or a barred one in *Civitas*. Where a mark before the king's name is required a pellet usually takes the place of the annulet of the larger coins.

The lettering on both series, gold and silver, shows very little variation, and such variation is confined to two letters, X and N, which have already been mentioned. The letter N on the inner legend of the groats and half-groats is always Roman, usually reversely barred but occasionally normally barred, and on some groats without a bar at all. Otherwise the normal form is a Lombardic N, and this is always used on both sides of the London pence and halfpence.

There are a few silver coins worthy of individual notice. There is a small group of groats and half-groats of London with an annulet on the king's breast [PL. XXI (V). 7; XXII (VI). 5]; these can be definitely dated to the same period as the Calais coins, which invariably bear this annulet, viz. Feb. 1363 to April 1365. It was

thought that these London coins might have been the result of the use of Calais obverses with London reverses, but this is not the case, as no coins show the same obverse die in use at the two mints. There is, however, another feature about the Calais groats and half-groats which is reproduced on the London coins, namely, a tiny pellet at the tail of the letter R in *Adiutorem*. The pellet is probably a privy mark, and it occurs on nearly all the London and Calais groats and half-groats which are similar in other respects. The Calais pennies never have the annulet on the breast [Pl. XXIII (VII). 3]; the obverse reading is the same as that of London.

The mint of York gives us some interesting varieties. The pennies show three different obverse legends: 1. EDWTRDVS•DEI•G•RAX•TR (no. 1 in list). This has the Treaty X and the round R, and is of considerable rarity. 2. EDWTRDVS•RAX•TRGLI with the square H and pellet stops. 3. EDWTRD•TRGL•R3DRS8hYB, exactly as London pennies; curiously enough, this is the rarest reading of the three (list no. 7). No. 4 in the list gives a York penny with a quatrefoil on the breast and before the king's name [Pl. XXIII (VII). 4].

The Durham coins show no varieties in obverse legend. They all appear to agree with legend no. 2 of York. The reverses, however, show differences: first there are the mules with the previous coinage and the reading DORALMΘ, then DVRMΘ on the majority of the true coins, and lastly the extraordinary reading DVRΛLMS [Pl. XXIII (VII). 5]. This coin is without the crozier. Why the crozier should have been omitted it is difficult to surmise, as there was

apparently no trouble at the time between the king and Bishop Hatfield.

The post-Treaty period, 1369-1377.

The Treaty of Brétigni was abrogated in Parliament on the 3rd of June, 1369, and by the 11th a new great seal was ready on which the French title appeared. The new coins were probably ready shortly after. The earliest post-Treaty coins, both in gold and silver, are mules with one side from a new die and the other from an old die of the Treaty issue; the gold coins show a new obverse, the silver a new reverse.

The earliest noble adds *FRT* to the obverse legend and, as has been already remarked, bears a crescent on the forecastle. This was almost immediately replaced by an obverse of true post-Treaty work with a new design for the embattlemented fore- and stern-castles. New letter-forms were also used, including the sign *H* for *et*; a Treaty reverse was still used. The same obverse die is then found with a new reverse which agrees with the obverse in lettering and has a chevron-barred *W* in *Ibat*. The smaller varieties are to be found in the list. London and Calais nobles are well known of this last period; the latter always bear the flag on the obverse, but the *Q* in the centre of the reverse is always replaced by *G*. This letter on the coins of both mints has either a pellet or a cross in front of it. On a very rare variety of the London noble, which has a cross in front of the *G* in centre of the reverse, there is an annulet on the point of the tressure below the letters *lhQ* [PL. XIX (III). 4]. Two pellets are noted at the sides of the upper and lower fleurs at the ends of the cross on the reverse of London

and Calais nobles, and on some Calais nobles either one or two pellets are placed just below the point of the shield on the obverse [Pl. XX (IV). 3]. The London half-noble as a true coin is unknown, and only one mule, which has a Treaty obverse, represents the London coinage. It has a true post-Treaty reverse with G and pellet in the centre [Pl. XIX (III). 6]. The Calais half-noble would appear to be more closely related to the early post-Treaty nobles with the crescent on the forecastle. It bears the French title, but has not the battlements on the turrets. It has G, however, not Q, in the centre of the reverse [Pl. XX (IV). 7, 8]. No quarter-nobles are known of either mint.

It is curious to notice that the X of RQX is of quite a new form on all the post-Treaty gold coins which bear the new sign H for *et*. It is somewhat like a St. Andrew's cross, and not of the curule-chair shape which might have been expected from its invariable use on the silver. It will be remembered that the Treaty gold always had the curule-shaped X except on a few quarter-nobles, whereas the Treaty silver very rarely used this form.

The post-Treaty silver coins were first struck with obverses of the old Treaty coins. The dies of the groats all have the annulet before the king's name. The reverses, however, belong to the post-Treaty series. Three coins of this description will be found in the list. On two of them an annulet or a pellet appears in the outer legend, an unusual occurrence in this period, which is generally characterized by saltire stops in this position. It is satisfactory to know that these two reverses are also found combined with obverses showing the French title and the new form

of *et.* We are thus able to place these groats early in the post-Treaty series. They are nos. 1 and 10 in the list and Pl. XXIV (VIII). 2, 4. All the other post-Treaty groats bear reverses where the inner legend shows a pellet, or a saltire, or both. By the obverse legends we are able to get some chronological sequence: (1) the groat with four titles; (2) the groat with three titles. These show the line of annulets under the bust, called chain-mail; (3) groats reading FRTRQIQ; (4) groats reading FRTRQ. Some of the groats show a pellet either side of the central lis of the king's crown and others a pellet just above it.

The initial mark on some of the early groats has a pellet in each quarter.

Some half-groats, mules with Treaty obverse and post-Treaty reverse, have saltire stops on the obverse, but no true Treaty half-groats with this variety of stop are known; their reverses are usually of normal post-Treaty type with pellet or saltire in the inner legend.

Following these is the well-known DI GRThalf-groat with the "chain-mail" annulets [Pl. XXIV (VIII). 7], and then the half-groats reading EDWTRDVS or EDWTRD REX TRGL H FRTRQ with a large bust. Some of these half-groats show the pellets by the sides of the central lis of the king's crown. The lists show some half-groats with a smaller and longer bust resembling that found on Richard II's coins. These remarkable half-groats usually have no mark in the inner legend, another characteristic of Richard's coins. The latest of them show also distinct lettering which must be considered as belonging entirely to Richard's reign, and late in the reign too. What these half-groats really are is uncertain. They are described

here because they bear the name of Edward. On one of them will be found a Roman *II* in *LOII* in which the bar is prolonged outside the letter. This was at one time thought to be an engraver's slip, but as it occurs on groats and half-groats of Richard's reign and on more than one die of each, it must be considered intentional [Pl. XXV (IX). 2].

The post-Treaty pennies, like the other silver coins, begin with mules, the obverses of which are struck from old Treaty dies. The reverses are true post-Treaty reverses; one reads *QIVITTS LONDON* with Roman *II* and it is placed here on account of the form *II* which never appears on Treaty pennies of London [Pl. XXIII (VII). 11]. Another reads **QIVITTS LONDON* with typical post-Treaty saltire and pellet [Pl. XXIII (VII). 10]. The true coins follow these with the new obverses. These are found with a large head very like that on the half-groat. The curious legend *EDWTRD R TNGLI H FRTRD* occurs on one, where *RHX* is abbreviated to *R*. This piece has a pellet on the king's breast [Pl. XXV (IX). 5]. Another penny has *FR* only as the French title. The remainder read *EDWTRDVS REX TNGLIA*. On some of these there is a cross on the king's breast [Pl. XXV (IX). 3] and four tiny pellets in the angles of the large cross on the reverse. With a slightly smaller bust an annulet occurs on the king's breast [Pl. XXV (IX). 6]. Lastly there are pennies with a small bust like that on the late half-groats and on the pennies of Richard II. The pennies are, however, normal Edward coins, and not, like the half-groats, anomalies of the reign of Richard. They have a voided quatrefoil on the breast [Pl. XXV (IX). 7].

Of halfpennies we know nothing, and of farthings

there are a few rare specimens which are attributed to this issue on account of the resemblance of the head to the corresponding head on Richard II's farthings [Pl. XXV (IX). 12].

The pennies of York of this period exist in fairly large numbers, and are nearly always in very bad condition. Pl. XXV (IX). 8 shows one with double annulet stops on the obverse, reading $\Theta D W T R D : R \ddot{A} X \ddot{S} T R G L \ddot{A} : H \ddot{S} F R$. One of these has an extra pellet between the pellets in each quarter of the reverse. Pellet stops are found on some York pennies and saltire stops on others. Those with the saltire stops have usually a curule-shaped X, whereas those with annulet or pellet stops have an X similar to that on the gold coins. Like the London coins, the York pennies have usually the obverse legend $\Theta D W T R D V S R \ddot{A} X T R G L \ddot{A}$. Some, however, read $\Theta D W T R D D I G R T R \ddot{A} X T R$ or $T R G$, and others $T R G L \ddot{A} H T$; both legends are peculiar to York. An annulet is occasionally found on the breast [Pl. XXV (IX). 9] and also a small cross. All the York coins bear the archbishop's sign, the quatrefoil, on the centre of the reverse.

The Durham pennies usually read $\Theta D W T R D V S R \ddot{A} X T R G L \ddot{A}$, and all appear to have saltires as stops. An annulet is found on the breast of some [Pl. XXV (IX). 10] and a cross or possibly a lis on others [Pl. XXV (IX). 11]. The reverse always reads $D V R O L M$, and the crozier which is on all of them is to the left. All the Durham pennies appear to have the curule-shaped X. Like the York coins, nearly all of them are in a deplorable condition.

MINT ACCOUNTS FROM JUNE 1361 TO SEPTEMBER 1369.

<i>London.</i>	Gold.			Silver.		
	<i>lb.</i>	<i>s.</i>	<i>dwt.</i>	<i>l.</i>	<i>s.</i>	<i>d.</i>
June 18, 1361 to Sept. 29, 1361	4,675	1	21 $\frac{1}{2}$	2,647	19	11 $\frac{1}{2}$
Sept. 30, 1361 to March 22, 1362	4,339	1	31 $\frac{1}{2}$	4,918	10	8 $\frac{1}{2}$
March 22, 1362 to Sept. 29, 1362	4,403	13	6 $\frac{3}{4}$	6,412	11	1
Sept. 30, 1362 to Feb. 11, 1363	736	1	31 $\frac{1}{2}$	755	13	4
Feb. 11, 1363 to Sept. 29, 1363	1,780	6	9 $\frac{3}{4}$	1,762	13	0
Sept. 30, 1363 to Sept. 29, 1364	1,365	16	9 $\frac{1}{4}$	2,271	14	1
Sept. 30, 1364 to Sept. 29, 1365	1,043	15	8 $\frac{3}{4}$	1,187	19	3
Sept. 30, 1365 to Sept. 29, 1366	1,101	5	7 $\frac{1}{4}$	nil		
Sept. 30, 1366 to Sept. 29, 1367	741	0	11 $\frac{1}{2}$	nil		
Sept. 30, 1367 to Sept. 29, 1368	1,680	4	1	1,754	19	6
Sept. 30, 1368 to Sept. 29, 1369	4,847	13	9 $\frac{3}{4}$	1,227	13	0

Calais.

Feb. 20, 1363 to April 10, 1364	3,528	13	4	2,678	0	0
April 10, 1364 to April 13, 1365	683	3	3 $\frac{3}{4}$	389	11	1
April 13, 1365 to April 13, 1366	6,387	1	11 $\frac{1}{2}$	nil		
April 13, 1366 to March 20, 1368	7,597	6	7 $\frac{1}{2}$	nil		
March 20, 1368 to Aug. 27, 1368	606	13	6 $\frac{1}{4}$	nil		
Aug. 27, 1368 to Oct. 26, 1370	3,461	10	5 $\frac{3}{4}$	nil		

MINT ACCOUNTS FROM SEPTEMBER 1369 TO SEPTEMBER 1377.

<i>London.</i>	Gold.			Silver.		
	<i>lb.</i>	<i>s.</i>	<i>dwt.</i>	<i>l.</i>	<i>s.</i>	<i>d.</i>
Sept. 30, 1369 to Sept. 29, 1370	1,480	7	0	1,556	5	5
Sept. 30, 1370 to Sept. 29, 1371	1,029	15	0 $\frac{1}{2}$	640	13	3
Sept. 30, 1371 to Sept. 29, 1372	1,455	1	6	139	1	9
Sept. 30, 1372 to Sept. 29, 1373	973	2	31 $\frac{1}{2}$	362	14	2
Sept. 30, 1373 to Sept. 29, 1374	642	16	0	372	13	0
Sept. 30, 1374 to Sept. 24, 1375	694	5	4 $\frac{1}{2}$	3,334	13	9
Sept. 24, 1375 to July 24, 1376	376	6	6	2,331	14	5
July 24, 1376 to Sept. 20, 1377	273	8	21 $\frac{1}{4}$	180	0	0

Calais.

Oct. 26, 1370 to Oct. 16, 1371	1,030	17	3 $\frac{1}{2}$	nil		
Oct. 16, 1371 to Nov. 4, 1373	4,672	7	9	nil		
Nov. 4, 1373 to June 16, 1374	608	10	11	nil		
June 16, 1374 to Nov. 4, 1374	123	12	7 $\frac{1}{2}$	nil		
Nov. 4, 1374 to July 14, 1375	110	4	7 $\frac{1}{4}$	nil		
July 14, 1375 to Nov. 4, 1375	97	19	0	nil		
Nov. 4, 1375 to May 13, 1381	1,984	11	11	nil		

The indentures of the period include the following :

1. Indenture with Robert de Portico to make nobles, half-nobles, quarter-nobles, in gold, and groats, half-groats, sterlings, and mailles, in silver. Every pound weight of gold to contain 4 oz. of nobles, 6 oz. of half-nobles, 2 oz. of quarter-nobles, and every pound weight of silver to contain 3 oz. of groats, 4 oz. of half-groats, 4 oz. of sterlings, and 1 oz. of mailles. No mention of farthings. The usual provision for privy marking and for trials of the pyx. Dated at Westminster, June 20, 35 Edward III (1361). (*Calendar of Close Rolls*, vol. xi.)

2. Indenture with Walter de Bardi in the same terms. Dated at Westminster, March 5, 35 Edward III (1361). (*ibid.*)

3. Indenture with Henry de Brisele as master and worker in the town of Caley in the same terms; also 100 lb. by weight of farthings to be made in each year, 1,200 to the lb. Tower, standard alloy. Pyx trials to be held at Calais, and then a proportion to be tried in England. Dated at Westminster, March 1, 37 Edward III (1363). (*ibid.*)

4. Indenture with Bardet de Malepils of Florence, master in the town of Caley, same conditions as no. 3. Dated Westminster, May 20, 45 Edward III (1371). (*Calendar of Close Rolls*, vol. xiii.)

A further document relating to the coinage of York is to be found in the *Calendar of Close Rolls*, vol. xiv, p. 50. To the treasurer and barons of the Exchequer, order upon the petition of Alexander, Archbishop of York, to view a record and process of the justices in eyre in Yorkshire and the rolls and memoranda of the Exchequer, and if assured that the facts are as stated, to cause the money dies for his change at York to

be delivered to him without difficulty or delay, &c. Dated at Westminster, October 24, 1374.

The mint accounts on the whole show smaller amounts coined than previously. These amounts dwindle to very little in comparison with the earlier figures, particularly in the post-Treaty period. Nevertheless, coinage at London went on continuously both in gold and silver and at Calais in gold. Many privy marks were therefore necessary, and it is unfortunate that search for these has led to very small results. A few unusual marks have been listed. The pellet at the tail of the R in *adiutore* on the London and Calais coins from Feb. 1363 to April 1365 may be one of the marks on the groats and half-groats [Pl. XXI (V). 7 and Pl. XXIII (VII). 1 and 2]. Whether the curule-shaped X shown on Pl. XXI (V). 6 is of this nature it is difficult to say. It is at least suggestive that this form is found on different dies only in one small group. Another possible mark on the silver is the absence of the D in *adiutore*, but as this only occurs on groats and half-groats one may wonder what was in use on the pennies and halfpennies of the same group. The annulet on the obverse combined with the barred A on the reverse can hardly have been one of these marks, as this main group evidently lasted a long time. The crescent on the gold is almost certainly a privy mark, and is probably datable to the quarter of the year in which the change from the Treaty to the post-Treaty issue took place.

With the advent of the post-Treaty issues more marks are to be found. The groats give us an initial cross with four pellets in the angles. The annulet stops on one groat and the pellet stops after POSVI

on another may also have served the same purpose. The saltire and pellet in the inner legend of the silver, and the small pellets either side of the fleurs-de-lis at the end of the cross, on the reverse of gold coins, are at least suggestive of privy marks, as is also the dot below the shield on the Calais gold. I have not noticed any broken letter punches during the period 1362-77.

The indentures do not give us much fresh information. Nos. 1 and 2, dated 1361, are for Treaty coins, and include halfpennies but not farthings, and they refer to the London mint. Nos. 3 and 4 refer to Calais, one for the Treaty period, dated 1363, and the other for the post-Treaty period, dated 1371. Both contain special orders for farthings. We are thus in the position of having in our trays London farthings for which no order has yet been found, and no Calais farthings, although the order for them is in evidence. The mint accounts show a complete absence of any Calais silver after 1365. We may yet find the halfpenny and farthing which are still unknown of Calais but were ordered by the 1363 indenture. One interesting document shows an order for the Archbishop of York to have his money dies; it requires no comment.

All acquittances for the period under discussion have eluded my search.

In concluding the final part of the story of the coinage of Edward III, I may say I am well aware of the incompleteness of the lists. Long as they are, there are doubtless many varieties which are not chronicled, though all I know are placed in the lists. The great difficulty in adding to the lists is the impossibility of conducting a satisfactory search in the museums and private collections all over the

country. One may hope that time will remedy many of these defects, and that some future student will be able to fill in many of the gaps in these lists, and thus render them more useful. In many cases it will be noticed that several dies are grouped together under one number. These dies only differ from each other in the spacing of some of the letters or the slightly different position of the ornaments. These small variants do not increase our knowledge except for counting the number of dies.

LONDON NOBLES of the Treaty Period.

The general legend is $\Theta D W T R D \Theta B I G R T R R A X R A X T R N G L D N S h Y B \Sigma \pi Q T$ Stops are double saltires between the words except either side of Σ , where only a single saltire is present. The ropes are 3 from stern, 2 from prow. The ship ornaments of lions and lis show the lions always turned to the right. The fleurs-de-lis are always in groups of two, and they sometimes begin the ornaments. There are always only 2 lions in the scheme.

The French arms are semé de lis where there is room for this. The lower shield seldom shows more than three complete flowers, with fragments of others. The forecastle has four quatrefoils arranged 1. 2. 1, and the stern-castle 1 and 3. The Σ on the nobles and half-nobles is always the curule-shaped variety.

The reverse legend is $h \Theta I \pi V T \Theta R T R N S I \Theta N S P \Theta R M \Theta D I V M I L L O R V M I B T T \Theta$ in central compartment. The stops are double saltires. $M \Theta D I V M$ and $I L L O R V M$ are subject to variation.

Group a. A saltire before $\Theta D W T$ π unbarred in $\pi Q T$ and $I B T T$

1. $\star \Theta D / W T R D \star \Theta B I G R T R R A X \star T R N G L \star D N S \star h Y B \star \Sigma \star \pi Q T$ The saltire before ΘD is below the fold of the sail. A lion begins the ship ornaments.

$h \Theta I \pi V T \Theta R T R N S I \Theta N S \star P \Theta R \star M \Theta D I V \star I L L O R V M \star I B T T$ Several dies noted of obv. and rev.
2. As 1, but two lis begin the ornament. Several dies noted of obv. and rev. One of these reads $M \Theta D V$ for $M \Theta D I V$

3. As 1, but $M \Theta D I V M \star I L L O R V \star$

4. As 1, but $P \Theta R M \Theta D I V$ Stops missing.

5. As 1, but the saltire before $\Theta D W T R D$ is above the fold of the sail. $I L L O R V M I B T T$ Stops missing.
6. As 5, but $T R T M I G N S$
7. As 1, but saltire above sail. $M E D I V M I L L O R V M$

Sub-Mules. *Obv.* Group *b*, *rev.* Group *a*.

The legend and stops as Group *a*. π in $G R T$ sometimes barred. π in $\pi Q T$ generally barred. An annulet before $\Theta D W T R D$ The ornaments on the ship and fore- and stern-castles as Group *a*.

1. $\Theta D W T R D : D E I : G R T : R A X : T N G L : D N S : h Y B : \Sigma : \pi Q T$ 3-1 ropes; lion begins.

Rev. As Group *a*, no. 1.

2. As 1, but $G R T$ *Rev.* $h Q \ast$, $I L L O R V$ Θ in centre prone.

3. As 2, but $h Y B \Sigma \pi Q T$ with stops omitted.

Rev. $h Q T V T M T R A N S I E N S P E R M E D I V M I L L O R V I B T T$ No stops. Θ in centre supine.

Group *b*. An annulet before $\Theta D W T R D$ π sometimes barred in $G R T$ and $\pi Q T$, always barred in $I B T T$

The ropes are generally 3-2, sometimes 3-1. The fore- and stern-castles occasionally omit a quatrefoil from the compartment intended for it.

1. $\Theta D / W T R D : D E I : G R T : R A X : T N G L : D N S : h Y B : \Sigma : \pi Q T$ Ropes 3-2; lion begins.

2. As 1, but $G R T$ Two trefoils missing in reverse spandrels.

3. As 1, but GRT, TQT Rev. As 1.

4. As 1, but GRT 3-1 ropes. Three different dies noted. Rev. As 1.

Group c. As b, with the addition of a crescent on the forecastle. Reverses as Group b 1.

1 As b 1, but GRT and crescent on forecastle. Two dies noted.

2. As c 1, but GRT Two dies noted.

LONDON HALF-NOBLES of the Treaty Period.

The general legend is GD/WTRD DEI G RAX TNGLI D hYB S TQT Stops double saltires between the words except either side of S, where a single saltire is found. The ropes are 3 from the stern, 2 from the prow. The ship ornaments are lion, two lis, lion, two lis, the lions turned to the right; French arms, semé de lis where possible.

The reverse legend is DOWING DE IN FVRORAI TWO TRGVTS MEI Θ in central compartment, double saltire stops.

Group a. A saltire before GD/WTRD All Ts unbarred.

1. *GD/WTRD:DEI:G:RAX:TNGLI:D:hYB:S:TQT The saltire is above the fold of the sail as on nobles 5, 6, and 7.

DOWING:DEI:IN:FVRORAI:TWO:TRGVTS:MEI Several obv. and rev. dies noted.

2. As 1, but no fleurs in the spandrills of the tressure.

3. As 1, but no stop after TNGLI

4. As 1, but no stop before MEI

Group *b*. An annulet before $\Theta D W T R D$ π sometimes barred in $\pi R G L$ and $\pi Q T$, always in the second π of $\pi R G V T S$

1. $\Theta D / W T R D : D \Theta I : G : R E X : \pi R G L : D : h Y B : S : \pi Q T$ Annulet above the sail.
 $D O M I N E : \Theta I : n : F V R O R E : T V O : \pi R G V T S : M \Theta$ Two obv. and rev. dies noted.
2. As 1, but $\pi R G L$ $\pi Q T$
3. As 2, but $\pi Q T$ Annulet below sail. $\pi R G L$ not visible owing to clipping. $\pi Q T$

LONDON QUARTER-NOBLES of the Treaty Period.

The general legend is $\Theta D W T R D D \Theta I G R T R E X \pi R G L$ Double saltire stops between the words. French arms semé. The X is sometimes the Treaty X, probably early, then curule-shaped.

Rev. $\Theta X T L T T B I T V R I N G L O R I T$ Double saltire stops between the words. X sometimes Treaty, sometimes curule-shaped. Lis in the centre.

Group *a*. No mark before $\Theta D W T R D$ All π s unbarred.

1. $\Theta D W T R D : D \Theta I : G R T : R E X : \pi R G L$ Treaty X 1. $\Theta X T L T T B I T V R : I N : G L O R I T$ Treaty X
2. As 1.
3. As 1, but $D \Theta I$ Θ for Θ
4. As 1, but $D \Theta I$ Θ for Θ
5. Same die as 4.
6. As 1, but $R E X$ Curule X
2. As 1, but Θ for Θ
3. As 1.
4. As 1, but Curule X
5. Another die as 4.
6. As 4. Two obv. and rev. dies noted.

Sub-Mules.

The same legend and stops. Annulet before EDWTRD π in πNGLi barred or unbarred.

Curule \times

Rev. Legend as Group *a*. Single or double saltire stops. Unbarred π in GLORIA Curule \times

1. $\circ\text{EDWTRD}\times\text{DEI}\times\text{GRT}\dots\pi\text{NGLi}$ 1. $\text{EX}\pi\text{LLT}\pi\text{BITVR}\times\text{DE}\times\text{GLORIA}$ Single saltire.

2. $\circ\text{EDWTRD}\times\text{DEI}\times\text{GRT}\times\text{RE}\times\pi\text{NGLi}$ 2. $\text{EX}\pi\text{LLT}\pi\text{BITVR}\times\text{DE}\times\text{GLORIA}\times$

Group *b*. An annulet before EDWTRD π in πNGLi barred or unbarred. π in GLORIA barred. Curule \times both sides.

1. $\circ\text{EDWTRD}\times\text{DEI}\times\text{GRT}\times\text{RE}\times\pi\text{NGLi}$ 1. $\text{EX}\pi\text{LLT}\pi\text{BITVR}\times\text{DE}\times\text{GLORIA}$ Four obv. and rev. dies noted.

2. $\circ\text{EDWTRD}\times\text{DEI}\times\text{GRT}\times\text{RE}\times\pi\text{NGLi}$ 2. Similar to 1. Two obv. and rev. dies noted.

CALAIS NOBLES of the Treaty Period.

The Calais nobles agree with the London nobles in both legends and stops except either side of Σ , where a trefoil often replaces the saltire. A flag at stern on some. The ropes and the various ornaments also agree. Q in centre of rev.

Group *a*. Saltire before EDWTRD All Ts unbarred.

1. *ED/WTRD*DEI*GRT*REX*TNGL*DNŠ*H*YB*Š*ŦQ*Ŧ No flag, saltire above fold of sail.
IHQ*ŦVT*ŦM*ŦR*ŦNŠIENS*PER*ŦMEDIV*ŦLLORV*ŦIB*ŦT Two obv. and rev. dies noted.
2. As 1, but with flag.

Group *b*. No mark before EDWTRD All Ts unbarred.

3. As 1, but no mark before EDWTRD No flag. Three obv. and rev. dies noted.
4. As 3, but with flag. Three obv. and rev. dies noted.

Group *d*. Quatrefoil before EDWTRD Ts all unbarred. A saltire either side of N

5. Legends as 1. Quatrefoil before EDWTRD With flag. A saltire either side of N. Three obv. and four rev. dies noted.

Group *e*. Annulet after ED Barred T in GRA and ŦQŦ and IBŦT

6. ED-/WTRD*DEI*GRT*REX*TNGL*DNŠ*H*YB*Š*ŦQ*Ŧ Ropes 3-2. No flag.

IHQ*ŦVT*ŦM*ŦR*ŦNŠIENS*PER*ŦMEDIV*ŦLLORV*ŦIB*ŦT A small V is used throughout.

CALAIS HALF-NOBLES of the Treaty Period.

The legends and stops and other details are the same as those on the London half-nobles except the replacement of the saltire either side of N by a trefoil as on the Calais nobles. Q in centre of reverse.

Group a. A saltire before $\Theta D W T R D$ $\overline{\pi}$ s unbarred.

1. $\ast \Theta D / W T R D \ast D \Theta I \ast G \ast R \Theta X \ast T R G L \ast D \ast h y b \ast \Delta \ast \pi \Theta T$ The saltire above the sail. Flag at stern.
2. The same obv. die? The rev. die similar.

$D O M I R \ast R \ast R \ast I \ast F V R \Theta R \ast T V \Theta \ast T R G V T S \ast M \Theta$

Group b. No mark before $\Theta D W T R D$ All $\overline{\pi}$ s unbarred.

3. Details as 1. No flag.
4. As 3. Flag at stern.
- 4*. Similar to 4.
3. Similar to 1.
4. Similar to 1.
- 4*. Similar to 1.

Group d. Quatrefoil before $\Theta D W T R D$ All $\overline{\pi}$ s unbarred. A saltire either side of Σ

5. Details as 1. Flag at stern.
6. As 5, but a crescent is added on the forecastle.
5. Similar to 1.
6. Similar to 1.

CALAIS QUARTER-NOBLES of the Treaty Period.

- | | |
|--|--|
| 1. $\Theta D W T R D \ast D \Theta I \ast G \ast R T \ast R \Theta X \ast T R G L$ $\overline{\pi}$ s unbarred, \times curule. | 1. $\Theta X T L T T B I T V R \ast I \ast G L O R I X$ Annulet in centre. $\overline{\pi}$ s unbarred, \times curule. Two obv. and rev. dies noted. |
| 2. As 1, but cross in circle added over shield. | 2. As 1. Two obv. and rev. dies noted. |
| 3. As 2, but pellet added before $\Theta D W T R D$ | 3. As 1. Three obv. and rev. dies noted. |
| 4. As 1, but plain cross over shield. | 4. As 1, but voided quatrefoil in centre. |
| 5. As 1, but crescent over shield. | 5. As 4. |

LONDON NOBLES of the post-Treaty Period.

New obverse dies including the French title and sometimes a crescent on the forecastle. The style very like the latest Treaty nobles. The reverses are the same as the last Treaty reverses, so the coins are considered mules.

1. $\circ \text{ED} / \text{WTRD} \times \text{DEI} \times \text{GRAT} \times \text{REX} \times \text{TNGL} \times \text{S} \times \text{FRAT} \times \text{DN} \text{S} \times \text{h} \times \text{YB} \times \text{S} \times \text{AQT}$ No bowsprit. Crescent on forecastle? Ropes 2-2. French arms and stops. Ornaments as on Treaty coins.

$\text{h} \times \text{A} \times \text{KT} \times \text{VT} \times \text{Q} \times \text{TR} \times \text{NS} \times \text{IONS} \times \text{PER} \times \text{MEDI} \times \text{V} \times \text{ILLORV} \times \text{IBAT}$ A in IBAT barred. A in centre reversed.

2. $\circ \text{ED} / \text{WTRD} \times \text{DEI} \times \text{G} \times \text{REX} \times \text{TNGL} \times \text{S} \times \text{FRAT} \times \text{DN} \text{S} \times \text{h} \times \text{YB} \times \text{S} \times \text{AT}$ Bowsprit, crescent, ropes 3-2. Lion, lis, lion, lis, lis on ship. French arms semé.

Rev. As 1, but ILLORVM A in centre normal.

3. $\circ \text{ED} / \text{WTRD} \times \text{DEI} \times \text{G} \times \text{REX} \times \text{TNGL} \times \text{S} \times \text{FRAT} \times \text{DN} \text{S} \times \text{h} \times \text{YB} \times \text{S} \times \text{AQT}$ Barred A in AQT No bowsprit, no crescent, ropes 3-2. Ship ornaments normal. French arms semé.

Rev. Similar to 2.

New obverse die, with the late abbreviation H for *et*, new lettering, fore- and stern-castles embattled. A new X, not curule-shaped.

4. $\circ \text{EDW} / \text{TRD} \times \text{DI} \times \text{GRAT} \times \text{REX} \times \text{TNGL} \times \text{H} \times \text{FRAT} \times \text{DN} \text{S} \times \text{h} \times \text{YB} \times \text{H} \times \text{ATQ}$ Annulet over sail, bowsprit, ropes 3-1. Lis, lion, lis, lion, lis, lion, lis on ship.

Rev. Same die as 1.

POST-TREATY NOBLES with the new post-Treaty reverse.

The new lettering on both sides. Annulet over sail. The \mathcal{G} in the centre of the reverse always has a pellet or a cross in front of it.

1. Same obv. die as mule 4.
 $\text{IhQ}^{\circ}\text{TVT}^{\circ}\mathcal{G}^{\circ}\text{TR}^{\circ}\text{VS}^{\circ}\text{I}^{\circ}\text{A}^{\circ}\text{S}^{\circ}\text{P}^{\circ}\mathcal{E}^{\circ}\text{R}^{\circ}\text{X}^{\circ}\text{M}^{\circ}\mathcal{E}^{\circ}\text{D}^{\circ}\text{IV}^{\circ}\mathcal{Q}^{\circ}\text{LL}^{\circ}\text{OR}^{\circ}\text{V}^{\circ}\text{M}^{\circ}\text{IBAT}^{\circ}\text{X}^{\circ}$ Chevron-barred \mathcal{A} in IBAT?
2. Same obv. die as 1.
Rev. Similar to 1, but \mathcal{G} for \mathcal{G} in all the words. Saltires omitted after IBAT A pellet at the base of the fleurs-de-lis at the upper and lower ends of the cross.
3. A die similar to 1. *Rev.* Similar to 1, but saltires omitted after IBAT No pellet at base of fleurs-de-lis.
4. A die similar to 1. *Rev.* Legend similar to 1. Saltires omitted after IBAT A pellet at base of upper lis.
5. Same die as 4. *Rev.* As 4. A small cross before central \mathcal{G} An annulet at point of tressure under $\text{IhQ IBAT}^{\circ}\text{X}^{\circ}$
6. Same die as 4. *Rev.* Similar to 5 in all respects.
7. A die similar to 1. *Rev.* Similar to 5, but omits the pendant annulet, retaining the cross before the \mathcal{G} IBAT One pellet at base of upper, two beside spike of lower lis of the cross.
8. Similar to 1, but XQVIT for XQ *Rev.* Same die as 7.

9. Same die as 8. *Rev.* Similar to 7, with cross before central Θ , but no pellets beside or at base of either lis of cross.
10. Similar to 8. *Rev.* Similar to 3, pellet before central Θ
11. Same die as 10. *Rev.* Similar to 3, but ends IBAT*
12. Similar die to 8. *Rev.* Same die as 4.
13. Similar die to 8. *Rev.* Similar to 3.
14. Similar die to 8. *Rev.* Similar to 3, but reads TRVNSI Θ S and IBAT*
15. Similar die to 8. *Rev.* Similar to 3, but reads ILLORV*
16. $\Theta DW / TRDV S \cdot DI \cdot GRT \cdot REX \cdot TUGLI \cdot H \cdot FR TUC \cdot DNS \cdot hIB \cdot H \cdot TQ \cdot T$ Ornaments, &c., as 1.
Rev. Similar to 11.
17. Same die as 16. *Rev.* Similar to 3. Three rev. dies noted.

LONDON HALF-NOBLE of the post-Treaty Period.

Mule.

Old obv. die of the Treaty period combined with a new post-Treaty rev.

Obv. Similar to Group *b* 1.*Rev.* $DOMIN \cdot \Theta \cdot N \cdot \Theta \cdot FVROR \cdot \Theta \cdot TVG \cdot TRGVTS \cdot \Omega \Theta$ Θ and pellet in centre.

No true half-nobles or quarter-nobles of London are known.

CALAIS NOBLES of the post-Treaty Period.

New obv. dies, which include the French title. A crescent on the forecastle. The ropes, ship ornaments, and other details agree with the Treaty nobles and also with the London post-Treaty mules. Annulet before GDWTRD

The rev. is the old Treaty rev. with Q in the centre.

Group I. No flag at stern.

1. $\text{GD/WTRD:DGE:RAX:TRG:S*FRK:DNS:hYB:S*AO-T}$ No flag. Crescent on forecastle.
 $\text{IhQ:XTVTQW:TRK:SIENS:PER:QEDIV:ILLORVQ:IBAT}$ Barred $\bar{\text{A}}$ in IBAT Q in centre
 supine.
2. Same obv. die as 1. *Rev.* Similar to 1, but TRK:SIENS and ILLORV Q in centre normal.
3. Same obv. die as 1. *Rev.* Similar to 1, but no stop after PER QEDIVQ:ILLORVQ Q in centre normal.
4. Similar to 1, but $\bar{\text{A}}$ in AO-T barred.
 $\text{IhQ:XTVTQW:TRK:SIENS:PER:QEDIV:ILLORVQ:IBAT}$ Q in centre normal.
5. Same die as 4. *Rev.* As 1, but Q in centre reversed.

Group II. With flag at stern.

Dies of the true post-Treaty issues, with the new lettering and the fore- and stern-castles battlemented. Flag at stern. Quatrefoil over sail, ropes 3-1. Ship ornaments lis, lion, lis, lion, lis, lion, lis. French arms semé.

1. $\Theta D W / T R D \cdot D I \cdot G R T \cdot R G X \cdot T N G L \cdot H \cdot F R T N Q \cdot D N S \cdot h B \cdot H \cdot T Q V I T$

Rev. Exactly like the rev. dies of London of the Treaty period, Group *b*, with barred Λ in $I B \Lambda T$ Θ in centre.

2. Similar to 1, but $T Q V I T$ * Two tiny pellets just below shield. *Rev.* Similar to 1.

3. Similar to 1. Pellet at right-hand top corner of shield. *Rev.* Same die as 1.

Group III. Obv. as Group II. *Rev.* lettering of the same style as the obv. Θ and pellet in centre.

1. Same obv. die as Group II, 1.

Rev. $I h Q \cdot T V T G M \cdot T R T N S (G N S \cdot P E R \cdot M \Theta D I V M \cdot I L L O R V M \cdot I B \Lambda T \cdot \Lambda$ unbarred in $I B \Lambda T$
 Pellet at sides and bases of upper and lower lis. Two rev. dies noted.

1*. Same obv. die as 1. *Rev.* Similar to 1, but no saltire after $I B \Lambda T$

2. Same obv. die as Group II, 2. *Rev.* Similar to 1, but no saltire after $I B \Lambda T$ and pellets at sides of upper lis only.

3. Similar to 1. *Rev.* Similar to 2, but pellets at sides of both lis and at the base of the upper lis only.

- 3*. Same die as 3. *Rev.* Same die as 1.
 4. Similar to 1. A tiny pellet just below shield. *Rev.* Another die similar to 1.
 5. Same die as 4. *Rev.* Similar to 2. Two pellets at left of the upper lis, one pellet at left of lower lis.
 6. Same die as 4. *Rev.* Similar to 1.
 7. Similar to 4. Pellet below shield. *Rev.* Similar to 2.
 8. Similar to 4. Pellet below shield. *Rev.* Same die as 4.
 This obv. die was used again under Richard II.
 9. Same die as 8. *Rev.* Similar to 1.

CALAIS HALF-NOBLES of the post-Treaty Period.

New obv. die with the French title, combined with an old rev. die of the Treaty period.

Mule.

1. $\text{GDV} // \text{TRD} \times \text{DI} \times \text{GRT} \times \text{RGX} \times \text{TNGL} \times \text{S} \times \text{FR} \text{TN} \text{D}$ Voided quatrefoil over sail. Lis, lion, lis, lion, lis on ship. Ropes 3-1. French arms semé. Flag at stern. Curule X Old form S for et.
Rev. $\text{DOMIN} \text{D} \times \text{IN} \times \text{FVR} \text{OR} \text{D} \times \text{TVO} \times \text{TRG} \text{VTS} \times \text{MD}$ Ts unbarred. Q in centre of rev.

True coins.

2. EDW / TRD * DI * GRT * REX * TRGI * S * FRTND * D Quatrefoil, ornaments, &c., as 1.

Rev. DOMINE * IN * FVRORE * TVO * TRGVTS * M * Θ in centre. Ts unbarred. No stop after M One stop after M

3. ED / W / TRD * DI * GRT * REX * TRGI * S * FRTND * Quatrefoil over sail, otherwise as 1.
DOMINE * IN * FVRORE * TVO * TRGVTS * M * Θ? in centre.

4. Another die similar to 3. Rev. Same die as 3.

LONDON GROATS of Treaty Period.

I. No mark before EDWTRD T unbarred in TDIVTOR

(a) With double saltire stops on both sides, nothing before the king's name. T unbarred.

1. EDWTRD◊DEI◊G◊RAX◊TRGL◊DŪS◊hYB◊Σ◊TQT

2. Same die.

3. „

4. As 1, but ends TQT

5. Same die as 4.

6. As 1, but ends TQT

6*. Same die as 6.

7. „

(b) As (a), but with single saltire stops on the reverse.

8. Same die as 1.

9. Same die as 4.

10. Same die as 6.

(c) As (a), but single annulet stops on obv. and double saltire stops on rev.

11. EDWTRD◊DEI◊G◊RAX◊TRGL◊DŪS◊hYB◊Σ◊TQT

12. EDWTRD◊DEI◊G◊RAX◊TRGL◊DŪS◊hYB◊Σ◊TQT

13. Same die as 12.

14. Another die as 11.

(d) *Obv.* As (c), single annulet stops. *Rev.* As (b), single saltire stops.

15. Another die as 11.

16. „

16*. Same die as 12.

17. EDWTRD◊D◊G(?)◊RAX◊TRGL◊D◊hYB◊Σ◊TQT

18. Another die as 11.

1. POSVI/*DEVN*Π/DIVTOR/EM*MAV LONDON CIVITAS
2. LONDON
3. Similar die to 2. „
4. POSVI*/ Otherwise as 2. „
5. POSVI*/ Otherwise as 1. LONDON
6. Similar die to 4. LONDON
- 6*. Similar die to 2.
7. Another die as 4.

8. POSVI*/DEVN*Π/DIVTOR/EM*MAV LONDON CIVITAS
9. Same die as 8.
10. Similar die to 8.

11. POSVI*/ Otherwise as 1. LONDON
12. Similar die to 4. LONDON
13. Similar die to 2.
14. „

15. Similar die to 8.
16. Similar to 8.
- 16*. Similar to 8.
17. „
18. „

(e) Double annulet stops on obv. *Rev.* As (b), single saltire stops.

19. EDWTRD:DEI:G:REX:TNGL:DRS:hYB:Σ:ΠQT

(f) *Obv.* As (e), double annulet stops. *Rev.* As (c), double saltire stops.

20. Same die as 19.

21. Similar to 19, but TGL for TNGL

22. Same die as 21.

23. Similar to 19.

24. Same die as 23.

25. Similar to 19.

Another bust, the face somewhat shorter.

26. Legend and stops as 19. Three dies noted.

27. Similar to 26.

28. „

29. „

Another bust, eyes circular.

30. Legend and stops as 19. Three dies noted.

31. Similar to 30.

32. „

33. Same legend and stops. The X of REX is curule-shaped.

Five dies noted.

(g) A similar bust. An annulet on the breast, a pellet at the tail of the R of ΠDIVTORΩM.

34. Legend and stops as 19. Two dies noted.

34*. As 34, but no annulet on breast.

(h) A bust with a long narrow head, hardly any relief. The lettering on both sides from coarse punches.

35. Same legend and stops as 19.

36. The same die as 35.

19. Same die as 8.

20.	POSVI/*	Similar to 2.	LONDON
21.	"	"	"
22.	"	"	"
23.	"	"	"
24.	"	"	"
25.	"	"	"

26.	POSVI/*		LONDON Three dies noted.
27.	POSVI/*	ᚠDIVTORÆVM	LONDON
28.	POSVI*/	ᚠDIVTORÆVM	LONDON
29.	POSVI*/	ᚠIVTORÆM MÆVM	LONDON

30.	Similar to 26.	Three dies noted.	
31.	Similar to 28, but TTS in POSVI quarter.		
32.	POSVI/*	ᚠDIVTORÆVM	LONDON
33.	Similar to 2.	Five dies noted.	

34.	POSVI/*	Similar to 2, but with R. in ᚠDIVTORÆ	Four dies noted.
34*.	Similar to 34,	with R. in ᚠDIVTORÆ	

35.	POSVI/*	Similar to 2.	
36.	Similar to 35, but	ᚠDIVTORÆM	

(i) *Obv* Legend and stops as 19. The letters $\pi\Omega\tau$ wide apart
Rev. π in $\pi\text{DIVT}\Omega\text{R}\Omega$ barred.

- 37. No annulet before $\Theta\text{DW}\tau\text{RD}$ X of square Treaty form.
- 38. Same die as 37.
- 39. As 37, a somewhat smaller bust.
- 40. Same die as 39.

(j) *Obv.* Legend and stops as 19. $\pi\Omega\tau$ closer together. An
 annulet before $\Theta\text{DW}\tau\text{RD}$ π in $\pi\text{DIVT}\Omega\text{R}\Omega$ not barred.

- 41. Normal legend.
- 42. Similar to 41.
- 43. Similar to 41.

44. Same die as 43.

- 45. Normal legend, no stops between ηYB Σ and $\pi\Omega\tau$
- 46. Similar to 41.

(k) *Obv.* Legend and stops as 19. An annulet before $\Theta\text{DW}\tau\text{RD}$
 π in $\pi\text{DIVT}\Omega\text{R}\Omega$ barred

- 47. Bust on the model of 34.
- 48. Another bust.
- 49. Same die as 48.
- 50. Another die with similar bust.

51. " "

52. " " Two dies noted.

53. " "

54. A large, well-spread bust.

55. A somewhat similar bust.

56. Again a large bust, curule-shaped X Die used for mule with
 post-Treaty coinage.

37. POSVI/*DEVNÆ/DIVTOR/ÆMÆAV LONDON CIVITAS

38. Similar to 37.

39. „

40. „

41. POSVI/*DEVNÆ/DIVTOR/ÆMÆAV LONDON CIVITAS

42. As 41, but LONDON

43. POSVI*/DEVNÆ/DIVTORE/VNÆAVN/
LONDON CIVITAS

44. POSVI/*DVNÆ/DIVTORE/VNÆAV/ LONDON CIVITAS
No Æ in DVN

45. Similar to 42.

46. Similar to 42.

47. POSVI/*DEVNÆ/DIVTOR/ÆMÆAV LONDON CIVITAS

48. Similar die to 47.

49. „

50. „

51. „

52. As 47, but NÆVN Two dies noted.

53. As 47.

54. „

55. „

56. POSVI*/DEVNÆDIVTORE/NÆAVN CIVITAS LONDON

LONDON HALF-GROATS of Treaty Period.

- I. No mark before $\Theta DWTRDVS$ Unbarred π in $\pi DIVTOR\Theta$
Generally all arches fleured.

Sub-groups (a) to (e) not represented in the half-groats.

(f) *Obv.* Double annulet stops. *Rev.* Double saltire stops.

1-12. $\Theta DWTRDVS\&R\&X\&TRGL\&D\&S\&h\&y\&B$

13. A similar die.

14. Same die as 12.

15. A similar die.

16. Same die as 15.

17-20. Similar dies.

21. Same legend and stops, no fleur on breast.

(g) A somewhat longer bust. An annulet on breast. A pellet at the tail of the R in $\pi DIVTOR\Theta$

22, 23. Legend and stops as before. Two dies noted.

(j) Annulet before $\Theta DWTRDVS$ π in $\pi DIVTOR\Theta$ not barred.

24. $\Theta DWTRDVS\&R\&X\&TRGL\&D\&S\&h\&y\&B$

25. Similar die to 24.

26. „

27. „

28. As 24, but no stops after DRS

29. As 24, but smaller bust and smaller fleurs.

II. (k) Annulet before $\Theta DWTRDVS$ π barred in $\pi DIVTOR\Theta$

30. $\Theta DWTRDVS\&R\&X\&TRGL\&D\&S\&h\&y\&B$ Large fleurs. *Obv.* die of 24.

31, 32. Similar dies to 30.

33-37. Legend and stops as 30. Small fleurs.

- 1-12. POSV / I:DEVM / *TDIVTO / RE:MEV LONDON CIVITAS
 13. Similar, but LONDON
 14. POSV / I:DEVM / *TIVTO / RE:MEV LONDON CIVITAS
 15. Another die similar to 14.
 16. Another similar die.
 17-20. Similar dies.
 21. Similar die.

22, 23. Legend and stops as 1. Two dies noted.

24. POSVI / *DEVM:TE / DIVTOR / EV:MEV LONDON CIVITAS
 25. POSV / I:DEVM / *TDIVT / OR:ME LONDON CIVITAS
 26. POSVI / *DEVM:TE / IVTOR / EV:MEV CIVITAS LONDON
 27. POSVI / *DEVM:TE / IVTOR: / ME:MEV CIVITAS LONDON
 28. POSVI / *DEVM:TE / IVTOR: / ME:MEV CIVITAS LONDON
 29. POSVI / *DEVM:TE / IVTOR: / ME:MEV CIVITAS LONDON

30. POSV / I:DEVM / *TDIVTO / RE:MEV LONDON CIVITAS

31, 32. Similar dies to 30.

33-37. Similar to 30.

LONDON PENNIES of Treaty Period.

I. No mark before GDWTRD π unbarred in TTS(f) *Obv.* Double annulet stops. *Rev.* Saltire after DOR1. GDWTRD \circ TRGL \circ RS \circ DRS \circ hIB'2. Similar to 1, but \circ hYB*Obv.* Double annulet stops. *Rev.* Annulet after DOR3. GDWTRD \circ TRGL \circ RS \circ DRS \circ hYB A long narrow bust.

4. Legend and stops as 2, nothing before GDWTRD

II. *Obv.* Pellet before GDWTRD *Rev.* π barred in TTS

(k) Double annulet stops. No mark after DOR

5. Legend and stops as 2, pellet before GDWTRD

6. Similar to 5.

7. As 6, but no stop after DRS Pellet before GDWTRD

LONDON HALFPENNIES of Treaty Period.

I. No mark before GDWTRDVS Unbarred π in TTS(f) *Obv.* Double pellet stops. *Rev.* Pellet after DOR1. GDWTRDVS \circ R \circ X \circ TR Early bust.

2. As 1.

3. As 1, but bust somewhat larger.

4. As 1, but a later bust.

II \times I. Pellet before GDWTRDVS Unbarred π in TTS*Obv.* Annulet stops. *Rev.* No mark after DOR5. GDWTRDVS \circ R \circ X \circ TR

- [illegible]

1. CIVITTS LONDON.
2. As 1, but pellets in quarters small and united. A pellet is inside the letter R of DOR.
3. As 1.
4. „
5. CIVITTS LONDON.

I × II. No separate mark before $\Theta DWTRDVS$ Barred $\bar{\Lambda}$ in TAS

Obv. Annulet stops. *Rev.* Annulet after DON

6. $\Theta DWTRDVS \cdot REX \cdot \bar{\Lambda} \bar{\Lambda}$ A wedge? before $\Theta DWTRD$ Pellet at upper l. corner of $\bar{\Lambda}$ and another within the letter $\bar{\Lambda}$ of $\bar{\Lambda} \bar{\Lambda}$

II. Pellet before $\Theta DWTRDVS$ Barred $\bar{\Lambda}$ in TAS

Obv. Annulet stops. *Rev.* Annulet after DON

7. $\Theta DWTRDVS \cdot REX \cdot \bar{\Lambda} \bar{\Lambda}$

LONDON FARTHINGs of Treaty Period.

1. $\Theta DWTRDVS \cdot REX$ Bust as on some of the early groats and halfpennies.

This coin is placed here on account of the bust and the Treaty X. The reverse may be of the Treaty issue or later.

2. Same legend and stops as 1, but somewhat shorter bust.
 3. $\Theta DW \dots \bar{\Lambda} X$ Smaller bust, very small letters.
 4. $\Theta DWTRDVS REX$ Bust as 2, no stop.
 5. Same die as 4.

CALAIS GROATS of Treaty Period.

- I. No mark before $\Theta DWTRD$ *Rev.* $\bar{\Lambda}$ in $\bar{\Lambda} DIVTOR\bar{\Lambda} \bar{\Lambda}$ not barred.

(g) *Obv.* Double annulet stops, an annulet on the king's breast.

Rev. Double saltire stops, a pellet at the tail of R in $\bar{\Lambda} DIVTOR\bar{\Lambda} \bar{\Lambda}$

1. $\Theta DWTRD \cdot D\bar{\Lambda} I \cdot \bar{\Lambda} G \cdot REX \cdot \bar{\Lambda} TRGL \cdot \bar{\Lambda} DRS \cdot hYB \cdot \bar{\Lambda} \cdot \bar{\Lambda} Q \cdot T$

Several obverse and reverse dies noted, but no variants.

These coins correspond accurately with Group I (g) of the London coins.

6. CIVITAS LONDON°

7. CIVITAS LONDON°

1. CIVITAS LONDON Wt. 5.5 gr.

2. As 1. Wt. 5.76 gr.

3. As 1, but very small letters. Wt. 6.3 gr.

4 CIVITAS LONDON. Pellets united. Wt. 4.5 gr.

5. Another die as 4. Wt. 4.3 gr. Worn and clipped.

1. POSVI/•DHVMEK/DIVTOR./EMEMV VIL/LT•Q/TLB/SIG

Pellet after LT

CALAIS HALF-GROATS of Treaty Period.

Group I (*g*)

1. $\Theta D W T R D V S \cdot R \bar{A} X \cdot T H G L \cdot S D N S \cdot h y B$

2. The same die as 1.
3. Another die as 1.
4. Same die as 3.

CALAIS PENNIES of Treaty Period.

No mark before $\Theta D W T R D$ Double annulet stops.

1. $\Theta D W T R D \cdot T H G L \cdot S R \cdot S D N S \cdot h y B$

Several obverse and reverse dies noted. No penny is known with the annulet on the breast.

YORK PENNIES of Treaty Period.

(All have quatrefoil in centre of reverse.)

Obv. Legend different from London pennies.

1. $\Theta D W T R D V S \cdot D \bar{H} I \cdot G \cdot R \bar{A} X \cdot T R$ Single annulet stops.

Three coins noted, all poor. They may or may not be from the same dies. They bear the well-known Treaty X

2. $\Theta D W T R D V S \cdot R \bar{A} X \cdot T H G L I$ Treaty X, barred H, pellet stops.

Many dies are known which only vary in the busts. Some of these are short and broad, others long and thin.

3. Similar to 2.

4. Legend as 2. Voided quatrefoil on breast and before $\Theta D W T R D V S$

5. Similar to 4, but of local work.

6. $\circ \Theta D W T R \dots \dots T H G L I$ Annulet before $\Theta D W T R D V S$

1. POSV/EDQVM/*TDIVTO/R.E:MEV VIL/LT.A/TLA/SIA
Pellet at foot of R and after LT
2. As 1, but no dot after the R of TDIVTORA
3. Another die as 2.
4. Another die as 1, with the dot.

1. VIL/LT.A/TLA/SIA Pellet after LT

1. CIVI/TTS/EBOR/TQI An extra pellet outside the group
under CIVI and TQI

2. CIVI/TTS/EBO/RTQI

3. Legend as 2. The quatrefoil is represented by a small incuse
cross.
4. Similar to 2.
5. Similar to 4.
6. „

Obv. Legend as on the London pennies.

7. EDWTRDSTNGLS[RSDN]S^ohYB An annulet on breast?
8. EDWTRDSTNGLSR³ . . . DNSghYB

A pellet before EDWTRD An annulet before CIVI and two annulets after TTS Much double-struck on obv. The annulets are probably double throughout.

Uncertain: Treaty or post-Treaty Period.

9. ED REX^oTNGLI^o

DURHAM PENNIES of Treaty Period.

Mules. *Obv.* 1363. *Rev.* 1361.

1. EDWTRDVS^oREX^oTNGLI

From the same reverse die as a coin in the British Museum of the 1361 issue.

2. Similar to 1.

3. „

The lettering of the reverses of 2 and 3 agree with that of 1.

Coinage of 1363-1369.

1. EDWTRDVS^oREX^oTNGLI

There are several obverse and reverse dies known of this description.

2. Similar to 1.

3. EDWTRDVS^oREX^oTNGLI Round R

4. As 3, but a smaller bust.

5. EDWTRDVS^oREX^oTNGLI

7. $\text{QIVI}/(\text{TTS})/\text{EBOR}/\text{TCI}$

8. $\circ\text{QIVI}/\text{TTS}/\text{EBO}/\text{RTCII}$ Annulet before QIVI

9. $\text{QIVI}/\dots/\dots/\text{TCIS}$

1. $\text{☿QIVI}/\text{TTS}/\text{DOR}/\text{LM}\Theta$ Crozier before QIVI

2. $\text{☿QIVI}/\text{TTS}/\text{DOR}/\dots$

3. $\text{☿QIVI}/\text{TTS}/\text{DOR}/\text{EL}\Theta$

1. $\text{QIVI}/\text{TTS}/\text{DVR}/\text{EM}\Theta^{\text{☿}}$ Crozier to left at end of legend.

2. As 1, but pellet before DVR

3. As 2.

4. As 1.

5. $\text{QIVI}/\text{TTS}/\text{DVH}\Theta/\text{LMIS}/$ No crozier. Two reverse dies known.

MULES of Treaty and post-Treaty periods.

Groats.

Treaty.

1. $\Theta D W T R D S D E I S G S R A X S T R N G L S D N S S h Y B \circ \Sigma \circ \pi Q T$

Very similar to Groat no. 37.

2. $\circ \Theta D W T R D S D E I S G S R A X S T R N G L S D N S S h Y B \circ \Sigma \circ \pi Q T$

Die of Groat no. 56.

3. Legend as 2. Treaty X

Half-groats.

Treaty.

1. $\circ \Theta D W T R D V S S R A X S T R N G L S D N S S h Y B$ Large fleurs.

Similar to nos. 24-27.

2. A similar die.

3. $\circ \Theta D W T R D V S S R A X S T R N G L S D N S S h Y B$ Saltire stops. Not represented on the true half-groats.

4. Same die as 3.

5. „

6. „

Pennies.

1. $\cdot \Theta D W T R D S T R N G L S R S D N S S h Y B$ Pellet before $\Theta D W$

There appears to be a tiny cross at the intersection of the limbs of the reverse cross.

2. Similar to 1.

3. Legend and stops as 1. A broader bust.

Post-Treaty.

1. *POSVI:/DÆVM* π /DIVTORÆ/M* \mathfrak{M} ÆVM* α IVI/T \mathfrak{A} S/
LONDO \mathfrak{H}
No initial mark. Saltire before POSVI, two pellets after it.
2. POSVI:/DÆVM* π /DIVTORÆ/M* \mathfrak{M} ÆVM. α IVI/T \mathfrak{A} S/*
LON/DO \mathfrak{H} *
Pellet stops. Chevron-barred π in T \mathfrak{A} S
3. POSVI*/DÆVM* π /DIVTORÆM* \mathfrak{M} ÆVM α IVI/T \mathfrak{A} S/
*LON/DO \mathfrak{H}

Post-Treaty.

1. *POSVI/DÆVM* π /DIVTOR/ÆM* \mathfrak{M} ÆV α IVI/T \mathfrak{A} S/*LON/
DO \mathfrak{H}
No i. m. Saltire before POSVI
2. POSVI/DÆVM* π D/IVTORÆ/M* \mathfrak{M} ÆV*/ α IVI/T \mathfrak{A} S/LON/
DO \mathfrak{H}
3. *POSVI A die similar to 1.
4. POSVI/DÆVM* π /DIVTOR/ÆM* \mathfrak{M} ÆV α IVI/T \mathfrak{A} S/LON/
DO \mathfrak{H}
5. Same die as 2.
6. POSVI/DÆVM* π /DIVTOR/ÆM* \mathfrak{M} ÆV α IVI/.T \mathfrak{A} S/*LON/
DO \mathfrak{H}
1. α IVI/T \mathfrak{A} S/.../DO \mathfrak{H} Chevron-barred π in T \mathfrak{A} S
2. Similar to 1. LON/DO \mathfrak{H}
3. * α IVI/T \mathfrak{A} S/.LON/DO \mathfrak{H} Unbarred π in T \mathfrak{A} S, saltire before
 α IVI, pellet before LON.

LONDON GROATS of post-Treaty Period.

1. ‡EDWTRD:DI:G:RAX:TRGLH:F:DNS:hIB:h:K

The initial mark has four pellets round it, and there is a row of annulets under the bust. Four titles are shown. The i.m. on the reverse is plain; double annulet stops are used; a barred K in ADIVTORQ, and a chevron-barred K in TQS. A saltire before CIVI and LOH

2. The same die as 1.

3. „

4. „

5. „

6. Similar to 1, but KQ instead of K

7. ‡EDWTRD:DI:G:RAX:TRGLH:FRTRQ:D:hIB

The initial mark and the annulets under the bust as 1.

8. The same die as 7.

9. „

10. EDWTRD:DI:GRT:RAX:TRGLH:FRTRQ:

A pellet either side of the central lis of the crown.

- 10a. Same die as 10.

11. „

12. Similar to 10.

13. Similar to 10, no saltire after FRTRQ

14. Same die as 12.

1. POSVIꝛ/DĒVMꝛꝥ/DIVTORĒ/MꝛMĒVM *CIVI/TAS/
*LON/DOÏ

2. POSVI/DĒVMꝛꝥ/DIVTORĒ/MꝛMĒVM CIVI/TAS/LON*/
DOÏ*

The stop before MĒVM is doubtful. Barred ꝥ in TAS,
normally barred Ñ in London.

3. POSVI*/DĒVMꝛꝥ/DIVTORĒ/MꝛMĒVM CIVI/TAS/*LON/
DOÏ*

4. POSVI/DĒVM ꝥ/IVTORĒ/MꝛMĒVM *CIVI/TAS/
*LONDOÏ

5. POSVIꝛ/DĒVMꝛꝥ/DIVTOR/ĒMꝛMĒV* CIVI/TAS*/LON/
DOÏ*

6. POSVI*/DĒVMꝛꝥ/DIVTOR/ĒMꝛMĒVM CIVI/TAS/
*LON/DOÏ

7. POSVI/DĒVMꝛꝥ/DIVTORĒ/MꝛMĒVM *CIVI/TAS/
*LON/DOÏ

8. As 7, but saltire after POSVI and MĒVM

9. As 7, but ꝛ after DĒVM

10. The same die as Treaty/post-Treaty mule no. 1 with *POSVI:

10 a. POSVI/DĒVMꝛꝥ/DIVTOR/ĒMꝛMĒV CIVITAS*/
LON/DOÏ*

11. POSVI*/DĒVMꝛꝥ/DIVTOR/ĒMꝛMĒV *CIVI/TAS/
*LON/DOÏ

12. POSVI CIVI/TAS/*LON/DOÏ*

13. POSVI/ MĒV* CIVI/TAS/*LON/DOÏ*

14. MĒV *CIVI/TAS/*LON/DOÏ

15-17. ~~GDWTRD DEGRTRRXTRGLHFRTRQIG~~

A pellet each side of the central lis. All from one die.

18. Similar to 15.

18 *a.* ,,

18 *b.* ,,

19. ,,

19 *a.* Same die as 19.

20, 21. Similar to 15, but ~~FRTRQIG~~

22. The same die as 20 and 21.

23. ,, ,,

24-26. Same legend and stops as 20. All from one die.

A pellet above the central lis of the crown and on each side of the fleur on the breast.

27. Same die.

28. Same legend and stops as 15, no pellets at sides of lis. A row of pellets across the king's breast.

29. The same die as 28.

30. Same legend and stops as 10, no pellets at sides of lis.

30 *a.* Same die as 30.

31. ,,

32. ,,

33. Similar to 30.

34. Same legend and stops as 13, no pellets at sides of lis.

35. Same die as 34.

36. Similar to 34.

37. Same die as 36.

38. Same die?

39. Similar to 30, but tall central lis.

40. Similar to 34, tall lis.

- 15-17. Similar to 12. Three dies noted with the same obverse die.
18. Similar to 11.
- 18 *a*. Similar to 12.
- 18 *b*. *CIVI/TTS/*LON/DOH
19. POSVI/DAVWXT/DIVTORΘ/ΩXMAVΩ CIVI/TTS/
LON/DOH
- 19 *a*. Similar to 12. Two dies noted.
- 20, 21. Similar to 12. Two dies noted used with this obverse die.
22. Die similar to 11, but POSVI/
23. POSVI/DAVWXT/DIVTOR/ΘXMAV̄ CIVI/TTS/LON/
DOH
No marks on inner legend.
- 24-26. POSVI/ *CIVI/TTS/*LON/DOH
Three different dies.
27. Die similar to 12.
28. POSVI/DAVWXT/DIVTOR/ΘXMAV *CIVI/TTS/*LON/
DOH
29. As 28, but the mark of contraction over the H of DOH is absent.
30. As 28, but CIVI/TTS/*LON/DOH*
- 30 *a*. Same die as 28.
31. As 28, but MAV̄
32. Similar to 28.
33. Similar to 28, but *CIVI/TTS/*LON/DOH
34. Same die as 33.
35. Similar to 28.
36. Similar to 28, but CIVI/TTS/*LON/DOH*
37. „ but *CIVI/*TTS/*LON/DOH
38. „ but CIVI/TTS/*LON/DOH*
39. Similar to 38.
40. Similar to 37.

LONDON HALF-GROATS of post-Treaty Period.

1. EDWARDVS REX ANGLIE FR

A pellet either side of the central lis of the crown. A row of pellets on right side of breast. A large bust.

2. Same die.

3. „

4. „

5. „

6. EDWARDVS REX ANGLIE FR

A pellet each side of lis, stops uncertain, much clipped.

7. EDWARDVS REX ANGLIE FR

Pellets beside lis.

7*. Legend and stops as 7 where visible, no pellets at sides of lis.

8. EDWARDVS REX ANGLIE FR

No pellets at sides of central lis.

9. Same die as 8.

10. „

11. „

12. „

13. Same legend and stops as 7.

No pellets beside lis. A smaller bust.

14. Same die as 13.

15. „

16. „

17. EDWARDVS REX ANGLIE FR

No pellets beside lis. A large bust like 8.

18. Same die as 17.

19. EDWARDVS REX ANGLIE FR

A small head and longer neck, like Richard II.

20. Same die as 19.

1. POSVI/DEVMET/DIVTOR/EMMEV ·CIVI/TTS/.LOH/
DOH.

Pellet before CIVI, LOH, and after DOH

2. As 1, but MEV No pellet after DOH, no mark of contraction
over DOH
3. As 2, but mark added over DOH
4. As 2, but CIVI/TTS/LOH/DOH*
5. As 2, but CIVI/TTS*/LOH/DOH
6. Legend as 1. ·CIVI/TTS/.LOH/DOH
7. POSVI/DEVMET/DIVTOR/. . . . CIVI/TTS/*LOH/DOH*
- 7*. Same die as 5.
8. POSVI/DEVMET/DIVTOR/EMMEV ·CIVI/TTS/.LOH/
DOH
9. Similar to 8, but CIVI/TTS/.LOH/DOH.
10. „ but CIVI/TTS/*LOH/DOH
11. „ but CIVI/TTS/*LOH/DOH*
12. POSV/IDEV*ET/DIVTOR/EMMEV CIVI/TTS/*LOH/
DOH*
13. Same die as 12.
14. Similar to 6.
15. Similar to 14.
16. POSVI/DEVMET/DIVTOR/EMMEV CIVI/TTS/LOH/
No mark in inner legend. DOH
17. Same die as 15.
18. Similar to 17, but CIVI/TTS/.LOH/DOH.
19. POSVI/DEVMET/DIVTOR/EMMEV ·CIVI/TTS/.LOH/
DOH
20. Similar to 19, but no marks or contraction in inner legend.

21. Same die as 19.
22. "
23. As 19, but ends *FRTRQ*
24. Same die as 23.
25. "
26. "
27. "

LONDON PENNIES of post-Treaty Period.

1. *EDWTRD·R·TNGLEH·FRTRQ* Pellet on breast.
2. Same die as 1.
3. *EDWTRD·R·TNGLEH·FR* Stop before *R·X*
4. *EDWTRDVS·R·TNGLEH* Large head, cross on breast.
5. Same die as 4.
6. Similar die to 4.
7. *EDWTRDVS·R·TNGLEH* Annulet on breast.
8. Same die as 7.
9. "
10. *EDWTRDVS·R·TNGLEH* No annulet.
11. Same die as 10.
12. *EDWTRDVS·R·TNGLEH* Small bust.
Voided quatrefoil on breast.
13. Same die as 12.
14. "
15. Very similar to 12.
16. Same die as 15.
17. Another die similar to 12.

No Post-Treaty halfpennies are known.

21. POSVI/DAV^M*T/DIVTOR/Θ^M*MΘV CIVI/TTS/LON/
DOH Lettering of reign of Richard II.
22. Same legend and stops as 21, lettering late in Richard II's reign.
23. Similar to 19, much clipped.
24. Similar to 21 in legend, lettering, and stops.
25. Similar to 24, perhaps later lettering.
26. Similar to 22.
27. POSVI/DAV^M*T/DIVTOR/Θ^M*MΘV CIVI/TTS/LON/
DOH

The first H of London has the bar prolonged outside the letter. This is only found in Richard's reign. The lettering is also of Richard's time.

1. CIVI/TTS/LON/DOH No marks.
2. +CIVI/TTS*/LON/DOH
3. *CIVI/TTS/LON/DOH
4. Similar to 3. Three reverse dies noted.
5. Similar to 4, but four tiny pellets in the angles of the cross.
6. Similar to 5, with the four pellets.
7. Similar to 3.
8. Similar to 7, a tiny extra pellet in quarters under LON and DOH
9. *CIVI/TTS/.LON/DOH Round Rs in London, pellet before
LON
10. *CIVI/TTS/.LO-/.DO-/
11. Similar to 5, with the 4 pellets in centre.
12. Similar to 3.
13. „
14. Same die as 6, with the four tiny pellets.
15. *CIVI/TTS/LON/DOH Unbarred H. Two extra pellets in
LON quarter.
16. Similar to 3 where visible.
17. Similar to 5 and 6, with the four tiny pellets.

LONDON FARTHINGs of post-Treaty Period.

1. EDWTRD:RAX:TNGL Pellet stops. A tiny head with no neck, as on coins of Richard.
2. EDWTRD:RAX:TNGL II reversely barred, a slightly larger head.

YORK PENNIES of post-Treaty Period.

1. EDWTRD:RAX:TNGL:FR' Double annulet stops.
Three or four obv. and rev. dies noted.
2. Similar to 1.
3. EDWTRD:RAX:TNGL:FR Large pellet stops.
4. EDWTRDVS RAX:TNGLIÆ Small pellet stops where visible,
lis on breast.
5. ‡EDWTRDVS:RAX:TNGLIÆ* Four pellets round i. m., single
saltire stops.
6. Same die as 5.
7. EDWTRD:RAX:TNGL:FRTRQ
8. EDWTRD:RAX: FR' Cross on breast.
- 8*. EDWTRD:RAX:TR FRQ
9. EDWTRD:RAX:TNGL:FR Annulet on breast.
10. Same die as 9.
11. EDWTRD:DI:GR:RAX:TNGL
12. Same die as 11.
13. "
14. EDWTRDVS:RAX:TNGLIÆ:AT
15. Same die as 14.
16. EDWTRDVS:RAX:TNGLIÆ: Annulet on breast, large head.
17. Same die as 16.
18. Legend and stops where visible as 16, no annulet, smaller head.
19. Same die as 18.
20. EDWTRDVS:RAX:TNGLIÆ*
21. EDWTRDVS:RAX:TNGLIÆ Annulet on breast, large head.
22. Similar to 21.
23. Same legend and stops as 21 where visible, cross on breast.

1. QIVI/TTS/LOR/DOR
2. QIVI/TTS/LOR/DOR
1. QIVI/TTS/EBOR/RTQI (quatrefoil in centre of all York pence).
2. Similar to 1, but an extra pellet added in each quarter.
3. Similar to 1 where visible.
4. *QIVI/TTS/EBOR/RTQI
5. *QIVI/TTS/*EBOR/RTQI
6. Similar to 5.
7. QIVI/TTS/QBOR/RTQI*
8. +QIVI/TTS*/EBOR/RTQI* i. m. before QIVI
- 8*. +QIVI/TTS/EBOR/RTQI* i. m. before QIVI
9. *QIVI/TTS/EBOR/RTQI* S altered.
10. Similar to 9.
11. *QIVI/TTS/EBOR/RTQI/
12. Similar to 11.
13. Similar to 11, but no saltire before QIVI
14. QIVI/TTS/EBOR/RTQI Several reverse dies noted.
15. QIVI/TTS/QBOR/RTQI*
16. . . VI/TTS./*EBOR/RTQI
17. +QIVI/.../*EBOR/RTQI i. m. before QIVI
18. QIVI/TTS/EBOR/RTQI*
19. QIVI/TTS/EBOR/RTQI
20. QIVI/TTS/*EBOR/RTQI
21. +QIVI/TTS/*EBOR/RTQI i. m. before QIVI
22. *QIVI/TTS/.../RTQI
23. *QIVI/TTS/.../RTQI Extra pellet in quarter under TTS

24. EDWTRDVS·RAX·TNGLIÆ Small bust with annulet.
25. Same die as 24.
26. EDWTRDVS·RAX·TNGLIÆ

The style and lettering of this penny is quite different from the preceding.

DURHAM PENNIES of post-Treaty Period.

1. EDWTRDVS·RAX·TNGLIÆ·FR Large head.
2. Same die as 1.
3. EDWTRDVS·RAX·TNGLIÆ Annulet on breast, large head.
4. Similar to 3, but the head is smaller.
5. EDWTRDVS·RAX·TNGLIÆ Annulet on breast, large head.
6. RAX·TNGLIÆ· Lis on breast, large head.
7. Legend and stops as 3, lis(?) on breast, small head.
8. Legend and stops as 3, nothing on breast, small head.

24. *CIVI/TTS/EBOR/TCI

25. Similar to 24.

26. CIVI/TTS/EBOR/TCI An extra pellet in each quarter.

1. +CIVI/TTS/DVR/OL⁹ i. m. before CIVI Crozier to left
after OLS

2. Similar to 1, but no i. m.

3. Similar to 2.

4. Similar to 2.

5. Similar to 2.

6. Similar to 2.

7. Similar to 2.

8. Similar to 2.

LIST OF COINS ILLUSTRATED.

Plate XVII (I). London Gold, 1363-1364.

- No. 1. Treaty noble, Group *a*. No. 2 in list.
- No. 2. Treaty noble, Group *a*. No. 6.
- No. 3. Treaty noble, Group *b*. No. 1.
- No. 4. Treaty noble, Group *c*. No. 1.
- No. 5. Treaty half-noble, Group *a*. No. 1.
- No. 6. Treaty half-noble, Group *b*. No. 1.
- No. 7. Treaty quarter-noble, Group *a*. No. 1.
- No. 8. Treaty quarter-noble, Group *b*. No. 2.

Plate XVIII (II). Calais Gold, 1363-1364.

- No. 1. Treaty noble, Group *d*. No. 5.
- No. 2. Treaty noble, Group *a*. No. 2.
- No. 3. Treaty noble, Group *b*. No. 4.
- No. 4. Treaty noble, Group *a*. No. 1.
- No. 5. Treaty noble, Group *b*. No. 3.
- No. 6. Treaty noble, Group *c*. No. 6.
- No. 7. Treaty half-noble, Group *d*. No. 5.
- No. 8. Treaty half-noble, Group *a*. No. 1.

Plate XIX (III). London Gold, 1369-1377.

- No. 1. London noble, Treaty/post-Treaty mule.
- No. 2. London post-Treaty noble. No. 2.
- No. 3. London post-Treaty noble. No. 17.
- No. 4. London post-Treaty noble. No. 5.
- No. 5. London post-Treaty noble.
- No. 6. London half-noble, Treaty/post-Treaty mule. No. 1.

Plate XX (IV). Calais Gold, 1363-1377.

- No. 1. Noble, Treaty/post-Treaty mule, Group I. No. 5.
- No. 2. Noble, Treaty/post-Treaty mule, Group II. No. 2.
- No. 3. Noble, post-Treaty, Group III. No. 1.
- No. 4. Half-noble, Treaty, Group *b*. No. 4.
- No. 5. Half-noble, Treaty, Group *b*. No. 3.
- No. 6. Half-noble, post-Treaty/Treaty mule. No. 1.
- No. 7. Half-noble, post-Treaty. No. 2.

- No. 8. Half-noble, post-Treaty. No. 3.
 No. 9. Treaty quarter-noble. No. 1.
 No. 10. Treaty quarter-noble. No. 2.
 No. 11. Treaty quarter-noble. No. 4.
 No. 12. Treaty quarter-noble. No. 5.

Plate XXI (V). Treaty Groats, London.

- No. 1. Saltire stops both sides, LONDON. No. 5.
 No. 2. Saltire stops both sides, TQXT. No. 10.
 No. 3. Single annulet stops on obv. No. 12.
 No. 4. Double annulet stops on obv., bust variant. No. 27.
 No. 5. Double annulet stops on obv., bust variant. No. 30.
 No. 6. Double annulet stops on obv., curule X. No. 33.
 No. 7. Double annulet stops on obv., annulet on breast,
 R with pellet on rev. No. 34.
 No. 8. Double annulet stops on obv., bust variant. No. 36.
 No. 9. Annulet before Edward, unbarred T in *adiutorem*.
 No. 43.

Plate XXII (VI). Treaty Groats to Farthing.

- No. 1. No mark before Edward, A barred in *adiutorem*.
 Groat no. 38.
 No. 2. Annulet before Edward, T unbarred in *adiutorem*.
 Groat no. 56.
 No. 3. Annulet before Edward, T unbarred in *adiutorem*.
 Groat no. 42.
 No. 4. No mark before Edward, T unbarred in *adiutorem*.
 Half-groat no. 8.
 No. 5. Annulet on breast, R with dot in *adiutorem*. Half-
 groat no. 22.
 No. 6. Annulet before Edward, T unbarred in *adiutorem*.
 Half-groat no. 29.
 No. 7. Annulet before Edward, A barred in *adiutorem*.
 Half-groat no. 37.
 No. 8. No mark before Edward, hIB, saltire after DON. Penny No. 1.
 No. 9. No mark before Edward, hYB, saltire after DON. Penny no. 2.
 No. 10. No mark before Edward (*sic*), annulet after DON. Penny no. 3.
 No. 11. Pellet before Edward, T barred in TAS, no mark after DON. Penny no. 5.

- No. 12. Pellet before Edward, $\overline{\text{A}}$ barred in $\overline{\text{TAS}}$, annulet after DON . Penny no. 6.
 No. 13. No mark before Edward, $\overline{\text{T}}$ unbarred in $\overline{\text{TTS}}$, pellet after DON . Halfpenny no. 1.
 No. 14. Pellet before Edward, $\overline{\text{A}}$ barred in $\overline{\text{TAS}}$, annulet after DON . Halfpenny no. 7.
 No. 15. No mark before Edward. Farthing no. 1.

Plate XXIII (VII). Treaty Calais, York, Durham;
 Treaty/post-Treaty Mules.

- No. 1. Calais groat, dot after R of *adiutorem*. No. 1.
 No. 2. Calais half-groat. No. 2.
 No. 3. Calais penny. No. 1.
 No. 4. York penny, quatrefoil before *Edwardus*, and on breast. No. 4.
 No. 5. Durham penny, $\text{DVR}\overline{\text{ELMIS}}$. No. 5.
 No. 6. Mule groat, London. No. 3.
 No. 7. Mule groat, London. No. 2.
 No. 8. Mule groat, London. No. 1.
 No. 9. Mule half-groat, London. No. 4.
 No. 10. Mule penny, London. No. 3.
 No. 11. Mule penny, London. No. 2.
 No. 12. Mule penny, Durham 1363/1361. No. 1 (p. 60).

Plate XXIV (VIII). Post-Treaty groats, and
 half-groats, London.

- No. 1. Groat with four titles. No. 5.
 No. 2. Groat with four titles, annulet stops on rev. No. 1.
 No. 3. Groat with three titles. No. 7.
 No. 4. Groat FRTRQ , two pellets after *posui*. No. 10.
 No. 5. Groat $\text{FRTRQI}\overline{\text{E}}$, pellets at sides of lis. No. 23.
 No. 6. Groat FRTRQ , pellets at sides of lis. No. 14.
 No. 7. Half-groat $\text{DI}\overline{\text{GRT}}$. No. 1.
 No. 8. Half-groat EDWTRDVS , no pellets. No. 15.

Plate XXV (IX). Post-Treaty half-groats, pence, and farthing
 of London; pence of York and Durham.

- No. 1. Half-groats, small head, late lettering on rev.
 No. 22.
 No. 2. Half-groat, small head, late lettering. No. 27.
 No. 3. Penny, cross on breast. No. 4.

- No. 4. Penny, without mark on breast. No. 10.
- No. 5. Penny, FRTNQ, pellet on breast. No. 1.
- No. 6. Penny, annulet on breast. No. 9.
- No. 7. Penny, quatrefoil on breast. No. 12.
- No. 8. Penny, York. Annulet stops. No. 1.
- No. 9. Penny, York. Annulet on breast. No. 21.
- No. 10. Penny, Durham. Annulet on breast. No. 3.
- No. 11. Penny, Durham. Lis on breast. No. 7.
- No. 12. Farthing. No. 1.

L. A. LAWRENCE.

REVIEW.

Die Chronologie der gallischen Kaiser, von S. Bolin. (Bulletin de la Société Royale des Lettres de Lund, 1931-1932, v.) pp. 62. C. W. K. Gleerups Förlag, Lund, 1932.

This short but valuable study deserves a special word of recommendation to numismatists, for it deals with a period where coins play a leading part and it depends largely for its results on the evidence of coins. Dr. Bolin, who is already favourably known for his fine study of hoards of Roman coins in Germany, has made a strikingly successful use of this branch of evidence here and has drawn from it some relatively sure conclusions about the sequence of Gallic Emperors. At the same time the literature has not been neglected; the merits of Aurelius Victor and Eutropius, for example, are clearly shown up against the gross errors of the writers of the Augustan History. An early date, A.D. 257 or 258, is suggested for the captivity of Valerian and defended with vigour and success. There are still doubtful points not a few—as for example the date from which Valerian I counted his tribunician power and the method of his count, or the date of the accession of Tetricus I. The general system of dating of the Gallic Emperors (p. 49) agrees exactly with the system worked out independently by Mr. Webb for vol. v. 2 of Mattingly-Sydenham, *Roman Imperial Coinage*, which is about to appear—an agreement which is strong evidence for the general correctness of the system.

We warmly recommend Dr. Bolin's admirable book to English readers.

H. M.

IV.

ROMANO-BRITISH NOTES.

[SEE PLATE X.]

CRUDE copies of first- and second-century Roman coins are not uncommon in the South and centre of England, but are rare in the North: and the presence of one among the local finds in the Chesters Museum deserves record. It has, like several other pieces of this kind, hybrid types: the obverse is derived from one of Faustina the younger, with a bungled legend and a bust which is almost as far removed from the original as the legend: the reverse has a design of slightly better execution, with the standing figure of Salus feeding a serpent twined round an altar and the inscription **P XVII COS IIII**: as the type occurs on bronze of Aurelius dated to **TR P XVII COS III**, that is presumably the model from which the die-maker worked. The coin is well struck up, and the engraving, though inartistic, is bold and thorough [Pl. X. 1]. In point of style it is very distinct from the copies of second-century date found in the South Midlands, which are artistically superior, but in lower relief and less sure in their treatment: three examples are given for comparison, all found at Woodeaton: (i) a copy of a dupondius of Trajan, *Matt.-Syd.* ii, p. 272, 382 or 385 [Pl. X. 2]; (ii) one of a dupondius of Antoninus Pius, of the issue of 140-144 with reverse type *Liberaltas* standing, apparently unrecorded for this series [Pl. X. 3]; (iii) one of a dupondius of Aurelius, *Matt.-Syd.* iii, p. 293, 1008 [Pl. X. 4]. The last is in the

collection of Sir Arthur Evans: the other two are in the Ashmolean Museum, from the Gordon collection.

* * * * *

The Chesters Museum has a small hoard of coins, which came to it with the Clayton collections wrapped in a paper inscribed "From Procolitia. 82 bas-Roman coins found July 1872, only one of Dioclesian to be made out". No further details as to the circumstances of the find seem to be known, but the condition of the coins is quite unlike that of the great mass found in Coventina's well at Procolitia, and it may be assumed that there is no relationship with these. The major part of the hoard consists of "barbarous radiates", as will be seen from the list given below: and it may throw some light on the date of issue of these copies of the official Roman issues.

The copies can be grouped in four grades: though there is no sharp line of distinction between any two grades, it is not difficult to say in most cases to which grade a specimen should be assigned. The general characteristics are as follows:

Grade A. Coins struck from unadjusted dies, in fairly high relief, on substantial flans, apparently cut out of sheet metal. The lines of the engraving are firm and the letters of the legends well formed: but the artists, though not technically incompetent, were evidently illiterate, as the legends are badly misspelt [Pl. X. 6].

Grade B. Coins similarly struck from unadjusted dies, but in rather lower relief and usually on smaller flans, probably cast. The execution of the dies is much weaker and the attempts at legends make no

sense: it is possible to recognize the originals from which the types were derived in some cases, but the resemblance is a distant one [Pl. X. 7-9].

Grade C. Coins of still smaller size, in some cases certainly, in most probably, cast. The work of these is definitely barbarous: the types are rarely recognizable, and there is either no attempt at a legend or a few stray dots and lines [Pl. X. 10-12].

The fourth grade comprises a number of coins which are artistically about the standard of grade B, but have been separated from them on account of their metal, which seems to include a high proportion of tin. Possibly they may be regarded as a special group of grade B produced at some centre which happened to have a large quantity of tin at its disposal [Pl. X. 13-15].

So far as can be judged from their condition, these "barbarous radiates" had seen little circulation before they were buried: those of grade A are on the average slightly worn, the rest comparatively fresh. Among the official coins found in the hoard, those of Claudius II are in poor condition, those of Valentinian and Valens rather more worn than the pieces of grade A: comparison with other hoards may make it possible to fix the length of circulation more exactly, but the evidence at present available would suggest that the coins of Valentinian had been in use for about half a century, and the coins of grade A about half that time. If this be accepted, grade A would represent the issues that were produced after the withdrawal of the legions stopped the supply of official Roman coinage: the more barbarous pieces are successive copies of grade A, which may have been made early in the fifth century.

The following list gives the contents of the hoard, so far as they can be summarily described. The total number of coins is 87, whereas the paper in which they were wrapped gives it as 82: the difference is probably explained by some pieces having been stuck together when found.

Official issues (8). Claudius II: Coh. 129, and one with illegible reverse. Victorinus (probably): illegible reverse. Tacitus: Coh. 137 ($\overline{\text{CA}}$). Diocletian: Coh. 93 (probably). Valentinian I: Coh. 12 ($\overline{\text{OF III CON}}$), Coh. 37 (mint-mark lost). Valens: Coh. 47 ($\overline{\text{SCON}}$).

Grade A (6). Derived from Claudius II; Eagle (consecratio) type: Victorinus; Invictus type: Tetricus; Hilaritas [Pl. X. 6], Pax, Victoria (?), and Virtus types.

Grade B (19). The heads on the obverses are rarely recognizable: three are probably derived from Tetricus and one from Victorinus, but the rest might be any one. Among the reverses can be found suggestions of the Hilaritas [Pl. X. 8], Invictus, Pax [Pl. X. 9], and Virtus [Pl. X. 7] types.

Grade C (22). Faint reminiscences of the same types can be traced in some coins of this class, but the majority have only jumbled lines. Pl. X. 10, may be derived from a transposed Invictus, and Pl. X. 11, from a Pax: Pl. X. 12, vaguely suggests Victoria.

Class four (31). As in grade B, both Tetricus and Victorinus can be discovered on the obverses, and Invictus [Pl. X. 15], Pax [Pl. X. 14], and Virtus [Pl. X. 13] on the reverses.

There is also one blank, probably intended for a coin of grade A.

In the collection of the late General C. Fagan there were a few Roman coins which he acquired in Carlisle in 1897, and which were said to have been found at Drumburgh between 1880 and 1890. All are of the first or second century A.D., with one exception, which seems to call for an explanation of its presence: this is a Macedonian provincial tetradrachm, of the series issued at Thessalonica with the name of Aesillas in 93-92 B.C.: it is too battered for precise identification, but is most probably of type 223 in Gaebler's *Corpus*. It is a plated coin (weight 15.20 grammes), and has been pierced: the surface is much rubbed, and a good deal of the wear seems to have taken place after the hole was made in it [Pl. X. 5].

It is most improbable that this coin could have found its way to the North of England in the course of trade: if it had been of good metal, it might conceivably have travelled as bullion, but a plated coin would have no value to any one outside the area where its type was officially current. Still less would a plated coin be likely to have remained in circulation for a century and a half, which is the approximate length of the period between the issue of this coin and the arrival of the Roman troops at Drumburgh. The most reasonable supposition is that it was worn as an amulet, very possibly by a native of Macedonia: this would be consistent with its condition, and the obverse type, the head of Alexander, would naturally have its appeal to a Macedonian. As a parallel, from the other end of the Empire, may be cited a pierced coin of Nicaea, struck under Antoninus Pius (*Recueil* 78), which was found at Oxyrhynchus: this would have no currency value in Egypt, but its type,

Dionysos Ktistes, would make it a suitable amulet for a native of Nicaea (*J.E.A.* 1922, p. 160).

* * * * *

A group of coins obtained by Sir Arthur Evans from the "Roman field" at Woodeaton, near Oxford, was recently deposited by him at the Ashmolean Museum for examination: and, among them, there were two small Greek bronze coins, one of Velia (*B.M.C. Italy*, p. 317, 124), the other of Boeotia (*B.M.C. Central Greece*, p. 41, 81 ff.). Other examples of Greek coins from Woodeaton were in the Gordon collection, but doubt has been thrown on their origin: so it is useful to record evidence which seems to leave no ground for suspicion. The two coins in question are both patinated in exactly the same way as hundreds of Roman coins from the field, which suggests that they are genuine associates: and there can be no reason to suspect "salting" here, as the field has been under cultivation for many years, and the only people who have frequented it have been farmers or labourers. It is true that archaeologists have occasionally visited it recently, but, even if any of them had desired to manufacture evidence by dropping Greek coins in the field, they would have had some difficulty in getting specimens which matched the Woodeaton patination.

The provenance of the Gordon collection has been questioned, not only on the ground of the presence in it of Greek coins and other issues earlier than the Roman occupation, but also because it contained coins of the end of the fourth century A.D. and later. In the latter respect also Sir Arthur Evans's parcel helps to support the credit of the Gordon collection, as it

includes examples of Honorius: and, as the Manning and Parker collections also have late fourth-century coins definitely labelled as from Woodeaton, the idea that the field ceased to be a centre of numismatic activity about 380 may be abandoned.

J. GRAFTON MILNE.

V.

THE PHILIPPUS IN THE WEST AND THE BELGIC INVASIONS OF BRITAIN.

[SEE PLATES XI-XIII.]

THE approach to the study of the coinage of pre-Roman Britain is made difficult by the lack of any certain criterion by which the earliest British coins may be distinguished from Gaulish. In the intercourse of trade between the South-East of Britain and Northern Gaul coins were brought across the Channel in large numbers, and penetrated deeply into the southern part of the country before ever the British developed the habit of striking their own coins. The important question of the date to which the early British coins may be placed is even more obscure.

It is now nearly seventy years since Sir John Evans published his book entitled *Ancient British Coins*, to which he added a supplementary volume in 1890, twenty-six years later. His method of approach to the first of these two problems, that of attribution, was to include in his volume all the coins that were found in considerable numbers in this country. The second question, that of date, he attempted to answer in broad terms by using the little knowledge that was available concerning the development of the Gaulish series, and by making a rough estimate of the period of time required for the development and gradual degradation of the types from the staters of Philip of Macedon. Thus he included in the British series many coins which subsequent French research has proved to be

Gaulish, and he hesitatingly conjectured that the first half of the second century B.C. saw the beginning of coinage in Britain.

There are, then, two fundamental points on which enlightenment is required before even a *terminus ante quem non* can be found for the British series. The first, the separating of the coins which, though circulating in Britain, were struck in Gaul, has already been elucidated in French publications.¹ The second problem, the date to which the Gaulish coins may be assigned, has made but little progress in the hands of French writers. They have always been impressed by the very real difficulty of spreading out the series of Gaulish statersto bring it in touch with its prototype, the stater of Philip II of Macedon; a satisfactory explanation of the source through which the stater came into Gaul has not yet been found, though conjectural trade routes have been devised to explain it; and a conjectural date in the second century has been assigned to the coinages of northern Gaul in order to link them up with the coinage of Philip in the fourth century and to allow a gradual development from south to north of Gaul.

La Saussaye,² writing in 1840, pointed out that the tribes of Cisalpine Gaul were without coinage, and that this could hardly have been so if coinage had been established in Transalpine Gaul before the complete conquest of Cisalpine about the year 170 B.C. Cisalpine Gaul, in closer touch with culture and coinage, must have had a coinage before, or at least as soon as,

¹ Particularly H. de la Tour, *Atlas de Monnaies Gauloises*, 1892, and A. Blanchet, *Traité des Monnaies Gauloises*, 1905.

² *Rev. Num.*, 1840, p. 260.

Transalpine Gaul. Nevertheless M. Adrien Blanchet,³ who quotes La Saussaye, expresses the opinion that the stater of Philip, struck between 359 and 336 B.C., spread immediately through the Greek world, and that it must have been imported early into Gaul through Marseilles.

The Philippus in Rome. For the correct explanation of the inroad of the stater into Gaul, it is to Rome that we must turn and not to Macedon. There is sufficient evidence to satisfy the most critical inquirer that the second century saw the staters of Macedon brought into normal currency in Rome both for internal and external use.⁴ The wars successfully fought by Rome against Philip V of Macedon and Antiochus III of Syria brought into Rome in the early part of the second century an enormous mass of gold staters as the spoils of war, and most probably an even greater number in the payment of tribute by the conquered kings.

The number of staters which found their way to Rome as spoils of war is available to us from Livy's accounts of the triumphs of T. Quinctius Flaminius for Cynoscephalae in 194 B.C., of L. Scipio Asiaticus for Magnesia in 188 B.C., of M. Fulvius Nobilior over the Aetolians in 187 B.C., of Cn. Manlius Vulso over the

³ *Monnaies Gauloises*, p. 177.

⁴ I am indebted to Mr. Harold Mattingly for suggesting to me the Roman currency of the Philippi. He has also given me his critical help in the dates of the comedies of Plautus, in which he and Mr. Stanley Robinson have done valuable research in connexion with their work, *The Date of the Roman Denarius* (published by the British Academy, 1933). I have to thank both my colleagues for much kind help.

Galatae in 186 B.C., and of L. Aemilius Paullus for Pydna in 167 B.C., namely:

194 B.C.	14,514 Philippi.	Livy XXXIV. 52
188 B.C.	140,000 "	" XXXVII. 59
187 B.C.	12,422 "	" XXXIX. 5
186 B.C.	16,320 "	" XXXIX. 7
167 B.C.	693,000 "	" XLV. 39 ⁵

These figures are only the booty carried in the triumphal processions. We should probably not be wrong in assuming that a portion, at least, of the tributes was paid in gold coin. The tribute imposed on Philip V in 196 B.C. was an immediate⁶ payment of 500 talents to be followed by ten annual payments of 50 talents. It was remitted in 191 B.C., after payment, that is, of 750 talents. Antiochus in 188 B.C. was made to pay an immediate 500 talents, a further 2,500 talents on ratification of peace terms, and twelve annual instalments of 1,000 talents, making 15,000 talents in all. How much of this was paid in cash is not known. We may also assume that in other ways, in soldiers' pockets, &c., many more gold Philippi were brought to Rome.

But it is possible to carry the inquiry a step further, and to show, by reference to Plautus, not merely that

⁵ The phrase in Livy is "Sequebantur ii, qui signatum aurum in vasis septem et septuaginta ferebant, quorum unumquodque, quemadmodum et ea, in quibus argentum translatum fuerat, tria talenta habebat." Seventy-seven pots holding 3 talents apiece is 231 talents of gold, i.e. 693,000 gold staters. In each triumph there was a large amount of gold and silver bullion; I am concerned only with the coined gold.

⁶ Not "cash" payment, as Tenney Frank writes in *Amer. Journ. of Philology*, vol. liii. 1, where the Roman revenue of these years is computed. The phrase in Livy (XXXIII. 30) is "dimidium praesens, dimidium pensionibus decem annorum".

Rome was flooded with gold coins, for indeed she might quite well have melted them down, but also that the gold Philippus became in the first half of the second century, and probably after 188 B.C., the ordinary coin in use in the everyday language of the people;⁷ and in this connexion we must remember that the mint of Rome itself issued no gold coinage.

The use of the words *nummus Philippus* (or *Philippus*) with or without *aureus*, and *nummus aureus* (which could only mean Macedonian staters) is found in Plautus mostly in three plays, *Bacchides*, *Poenulus*, and *Trinummus*; otherwise the use is rare. The actual number of times the denomination occurs (including 6 occurrences in *Bacchides* and 2 in *Poenulus* where *nummus* is used alone but the context makes it certain that the *nummus aureus Philippius* is intended) is:⁸

Bacchides 21, *Poenulus* 13, *Trinummus* 7, *Miles Gloriosus* 2, *Asinaria* 1, *Curculio* 1.

The date of these plays, where any evidence is available, is important for our purpose.

Bacchides gives an indication of date in v. 1072-3:

Sed, spectatores, vos nunc ne miremini
Quod non triumpho: pervolgatumst, nil moror

(triumphs are too hackneyed, I have no use for them).
It is not a very definite criterion; triumphs were

⁷ Menadier's explanation (*Die Münzen und das Münzwesen bei den Scriptores Historiae Augustae*, p. 28) that Plautus is copying Menander in the use of the gold coin is not satisfactory. If so, why are the uses of it crowded in three later plays? and why does Terence never use it?

⁸ I have not set out the references in each play. They may be found in G. Lodge's *Lexicon Plautinum* under the headings *Philippius*, *Philippus*, *Aureus*, and *Nummus*.

numerous between 197 and 183 B.C. In 197 Cornelius and Minucius triumphed over Cisalpine Gaul; in 195 Marcellus over the Insubres and Comenses, Minucius over Farther Spain; in 194 Porcius Cato over Spain, Quinctius Flaminius for Cynoscephalæ; in 191 Cornelius over the Boii; in 190 Acilius over Antiochus; in 188 Regillus for his naval victory, Scipio for Magnesia; in 187 Fulvius Nobilior over the Aetolians; in 186 Vulso over the Galatae; in 185 L. Manlius for Spain; in 184 Calpurnius and Crispinus over the Lusitanians and Celtiberians; in 183 Terentius for Hither Spain. It was after 190 that triumphs became an annual event, and feeling against the cheapening of the triumph showed itself after 188 and caused bitter discussion on the proposal to grant a triumph to Vulso in 186.⁹ Allusions in the play to the Bacchanalia, though not necessarily having direct reference to the Lex de Bacchanalibus, which was passed in 186 B.C., at least derive their point from the feeling which prompted legislation and therefore indicate a date very little before, if not in or after, 186; this conforms with the less definite evidence of the triumph reference.

Poenulus has a direct reference to the capture of Sparta in v. 663-5:

nam hic latro in Sparta fuit,
Utquidem ipse nobeis dixit, apud regem Attalum;
Inde nunc aufugit, quoniam capitur oppidum.

It must therefore have been written in or after 188 B.C.

Trinummus is known, from the reference to *novi aediles* in v. 990, to be not earlier than 194. The play

⁹ Schanz, *Gesch. der Röm. Literatur*, ed. Hosius (Müller, *Handbuch der Altertumswissenschaft*), refers the passage to the four triumphs of the year 189. There were no triumphs in that year.

is full of Syrian references, which require a date during or after the Syrian war (192-189 B.C.). Mr. Tenney Frank, on grounds of political allusions to the struggle of Cato with Scipio, puts it in 187, but such evidence is not conclusive within a single year.

Miles Gloriosus in v. 211-12:

Nam os columnatum poetae esse indauidi barbaro,
Quoi bini custodes semper totis horis occubant,

refers to the incarceration of Ennius in 206 B.C., and must therefore have been written in that year or shortly after.

Asinaria has a vague punning reference to Scipio in lines 123-4:

Nam ego illuc argentum tam paratum filio
Scio esse quam me hunc scipionem contui;

a reference to the year 212 B.C. seems hardly justified.

Curculio has an allusion to the Lex Sempronia, which in 193 B.C. applied the Roman laws of usury to all transactions with Roman citizens. The passage in *Curculio* contains a comparison between the pander and the money-lender (v. 507-10):

Hi saltem in occultis locis prostant, vos in foro ipso:
Vos faenore, hi male suadendo et lustris lacerant homines.
Rogitationes plurimas propter vos populus scivit,
Quas vos rogatas rumpitis.

The play cannot therefore be earlier than 193 B.C.

The three plays which contain frequent references to Philippi, the *Bacchides*, *Poenulus*, and *Trinummus*, contain allusions which justify the conclusion that all three of these plays were written about the years 188-186 B.C., the period immediately following the triumph of Scipio Asiaticus, which displayed among the spoils of Magnesia the huge number of 140,000

Philippi. *Curculio*, which is certainly after 193 B.C., contains only one reference and that gives no indication of the currency of the Philippus in Rome; it is merely the statement of an intention to have a golden statue erected in Caria out of Philip gold (*ex auro Philippeo*). *Asinaria*, which has one reference to Philippi, may possibly be an earlier play. But the *Miles Gloriosus* was certainly written before 200 B.C.; it contains two references, namely:

Talentum Philippium huic opus aurist (v. 1061), and
Plus mi auri millest modiorum Philippi (v. 1064);

it is not very material that in both cases a weight of gold and not a coin is mentioned. It is not suggested, however, that the Philippus was unknown in Rome before the Macedonian wars; the references in *Miles Gloriosus* and *Asinaria* need not surprise us. But the common occurrence of the gold coin in the three late plays shows more than a mere familiarity with the coin; conversation has adopted it as the ordinary current coin.

Unfortunately it is not possible to carry farther the currency of the Philippus in Rome; it began apparently in or shortly after 188 B.C., but of the duration of its currency we have no literary evidence. Terence uses Greek weights and denominations, drachma, mina, talentum, &c., and only mentions a *nummus (argenteus)* two or three times. The fragments of Lucilius (ob. 103 B.C.) afford no evidence.

The Philippus in Gaul. The recognition of this second birth of the Philippus as the gold coinage of Rome in the second century B.C. enables us to view its entry into Gaul in a new light. It is not Greek trade

but Roman trade that carries it into Gaul; it is no longer necessary to devise a trade route to bring it from Macedon all the way round Italy by sea to Marseilles.¹⁰ Nor does the sack of Delphi in 279 B.C., which is still sometimes alleged to be the source of the Gaulish supply of gold coins, play any part in the evolution of the Gaulish coinage. As M. Blanchet has pointed out, the Gauls that attacked Delphi were not Western Gauls, and even had Western Gauls taken part in the campaign they could hardly have retained any plunder after their disastrous retreat. In point of fact, the temple was not sacked;¹¹ it would probably have yielded but little treasure at that time if it had been. Incidentally the Galatae had ample opportunity of collecting all the gold they wanted during their occupation of Macedon without sacking Delphi.

There are two points which are always the subject of comment in this connexion: that the Philippus itself is but rarely found in Gaul, and that the earliest imitations are not found in the neighbourhood of Marseilles. The first seems to be nothing more than an illustration of Gresham's Law; the Gaulish staters were of lower weight and poorer metal than the original Philippi, which therefore did not remain long in currency when the native coinage began.

The lack of imitation of the Philippus in, or in the neighbourhood of, Marseilles is a very significant matter. The explanation of its entry into Gaul in the course of trade through the port of Marseilles has been accepted in full consciousness of this important feature,

¹⁰ As R. Forrer in *Keltische Numismatik*, 1908.

¹¹ See *Cambridge Ancient History*, vol. vii, p. 103.

which has itself therefore required special explanation. This has been provided by giving the Philippi a non-stop run through Marseilles and alleging that the silver tradition of Marseilles was too strong to allow them to stay there in currency. Opportunity probably plays a greater part than tradition. Rome, in spite of her silver tradition, did not hesitate to make use of gold when the Macedonian wars gave her the opportunity.

It is well away towards Central Gaul, in the country of the Aedui, Arverni, and Lemovices, that the earliest imitations of the Philippus are found; it is not reasonable to suppose that a trade route by the Rhone and Saône valleys carried gold coins up as far as Lyon, or farther north, before their use inspired imitation, and that imitation once begun took a westward movement, away from the great river courses, towards the Arverni and Lemovices. It is only necessary to appreciate the development of the Philippus as the gold coinage of Rome in the second century B.C. to see at once how significant it is that these tribes were the first to imitate it.

The subjection of the Salluvii and the foundation of the Roman military camp near Aix-en-Provence, later to become the colony of Aquae Sextiae, in 123 B.C. aroused anxiety among outlying tribes and led to the rising of the Arverni, who were the dominant tribe of Central Gaul, under Bituitus, while their rivals, the Aedui, allied themselves with Rome. The consequent campaign of Ahenobarbus in 121 B.C. against the Allobroges, who were on the side of the Arverni and refused to surrender fugitives of the Salluvii, resulted in a victory which was followed by the decisive defeat

of the Arverni and Allobroges by Fabius Maximus in August of the same year. This was the first occasion when Rome obtained a real footing in Gaul; the revolted tribes rendered formal submission to Rome, and other surrounding tribes, including the Aedui and Sequani, were allied to Rome under the title of Friends and Allies of the Roman People. Thus was formed a sort of Roman protectorate, which for the first time opened up direct and friendly intercourse with the tribes of Central Gaul. It is impossible to treat as mere coincidence the fact that the earliest Gaulish imitators of the Philippus, which since the second decade of this century had become the gold coin of Rome, were the Aedui and Arverni and their neighbours, the Lemovices.

It results therefore as the logical conclusion of the currency of Philippi in Rome in the second century that the date of its earliest imitation in Gaul must be brought forward from the middle of the third century to the last quarter of the second. In the north of Gaul, therefore, coinage can hardly have begun before the last years of the century; it is significant that the immigrations of the Belgae into Northern, i.e. Belgic Gaul, occurred in the years 150-125 B.C.¹² It was the Belgae who struck the stater coinage in Northern Gaul; it was the Belgic invasion of Britain that conveyed the art of coinage across the channel. Two distinct invasions of Britain have been traced archaeologically and dated to 75 B.C. or shortly after, and about 50 B.C.¹³

¹² Hawkes and Dunning, *The Belgae of Gaul and Britain* (*Arch. Journ.* lxxxvii), p. 180.

¹³ T. Bushe-Fox, *Swarling Report*, and Hawkes and Dunning, *op. cit.*

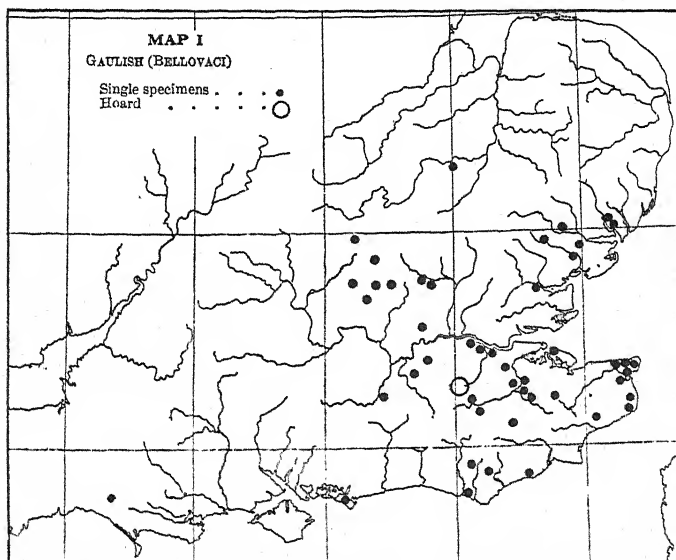
Gaulish (Bellovaci?) Coins current in pre-Belgic Britain. Sir John Evans, in *Ancient British Coins*, accepted as British a coinage which, though now generally recognized as a Gaulish issue and attributed to the Bellovaci, still appears in some publications as British.¹⁴ Both the stater and its quarter are known [Pl. XI. 1, 2, 3]. The very broad flan is a striking feature of the coins. They are figured in Evans A 1-8. The head has not yet lost its face, but the remainder of the head is immensely exaggerated and occupies nearly the whole field, leaving but little room for the face. Prominent features are the laurel wreath and transverse diadem and the fold of drapery pinned over the shoulder. The reverse type has already reduced itself to one horse with a small oval ornament, all that remains of the chariot-wheel, below its tail; a winged charioteer, or victory, is seen above the horse. The weight of the staters is usually about 115 grains, but specimens are sometimes as high as 120 grains, that of the quarter-stater 28-30 grains. Specific gravity is between 15.0 and 16.5; analysis of one specimen (sp. g. 15.0) yielded 69 per cent. of gold.¹⁵

The distribution of the coinage of the Bellovaci in Britain is illustrated on Map I. The coins seem to have been brought across the Channel to the coasts of Essex, Kent, and Sussex, and then to have proceeded along the Thames, and up the Medway into Kent, and also by the northern waterways of the Thames through Hertfordshire to the borders of Bedfordshire and Buckinghamshire. It is interesting to compare this map with Mr. Hawkes's map of the

¹⁴ e.g. in C. Seltman, *Greek Coins* (Methuen, 1933).

¹⁵ *Num. Chron.*, 1927, p. 372.

distribution of the pedestal urns, which are characteristic of the first Belgic invasion.¹⁶ In spite of the close resemblance of the two maps, there is reason to



suppose that this is not a coinage brought by the invaders, but a coinage introduced by traders along the routes which were later followed by the Belgic settlers. In the first place, no hoards have yet been found in England that were buried during its currency; they occur only in the hoards found at Carn Brea in Cornwall (not marked on the map), Westerham in Kent, and somewhere in Essex (not marked on the map) as stragglers among coins of later date. Secondly, this coinage of the Bellovaci did not, in spite of its deep penetration into the country, become the model for

¹⁶ *Op. cit.*, p. 189.

British imitations; indeed, far from being the origin of the British coinage, it bears no relation to it save as a remote ancestor through a derivative in Gaul. In these two peculiarities, the absence of hoards and the lack of native imitation, it differs from the coins of the Atrebatas which we shall next consider, and they are precisely the features which one would expect to distinguish a coinage which represents the establishment of trade routes from one which represents the settlements of an immigration. It therefore preceded the settlements of the first Belgic invasion, and its currency in England may be placed towards the end of the first quarter of the first century B.C.

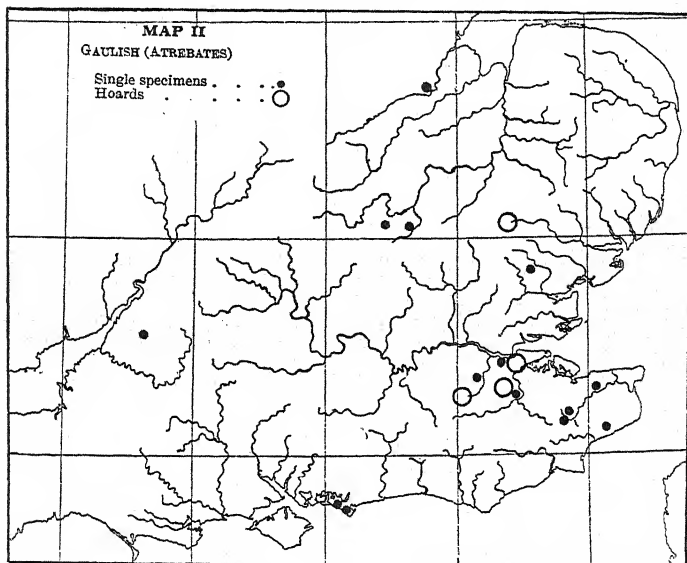
A series, which is less common, but which seems to have accompanied the coins of the Bellovaci along the trade routes [Pl. XI. 4-7; Evans D 2-4, K 1, 2], has a peculiar technical interest. Some of the coins, which again are of both the stater and quarter-stater denominations, have the obverse deliberately defaced on the die; others seem to form a new obverse design by copying the lines of defacement. The reverses of the defaced coins [Pl. XI. 4, 6] bear the type of the Bellovaci coins or are very similar, but those of the second group [Pl. XI. 5, 7] have a distinct type which represents a small monkey-like figure perched on the horse's rump and holding a long pole. The staters weigh 118 to 120 grains—one is as high as $121\frac{1}{2}$ grains; the quarters are usually, when in good condition, between 28 and 29 grains; one with the ordinary Bellovacian reverse is 29.8 grains. The specific gravity is usually between 15.5 and 16.5. Their distribution (it is not marked on the map) seems to follow approximately the distribution of the coins of the Bellovaci in the

farther reaches of the Thames waterways, in Middlesex and Hertfordshire, and in Surrey, but they have not yet been recorded on the lower Thames (not, that is, below London) nor in the coastal districts except one in Kent.¹⁷ Their spread into the farther areas of the Bellovacian find-spots, missing the nearer regions, would seem to indicate native imitation of that coinage. Nevertheless, I incline to agree with the authorities who on grounds of French provenance attribute them to Belgic Gaul (De la Tour, uncertain; Blanchet, Morini; Forrer, Caleti); the reverse type, especially the lyre-ornament below the horse, is in my opinion essentially of Gaulish character; it has no parallel or derivative in the British coinage.

Gaulish (Atrebates?) Coins of the First Belgic Invaders. The currency of the Bellovacian coinage in Britain was very soon followed and superseded by the coins which are attributed to the Atrebates of Gaul [Pl. XI. 8; Evans B 7]. The obverse has the conventional form of head with featureless face, strongly pronounced curls, wreath, and diadem, and characteristic crescents over the forehead and ear; the horse is of disjointed form in motion to right, above it is a curved ornament that represents the charioteer or victory, and below its tail is the eye-ornament representing the chariot-wheel. The stater only is known; it has no corresponding quarter-stater. The weight is usually between 100 and 103 grains, but specimens also

¹⁷ The find-spots recorded are, of Group I: *Surrey*, Kew, Adlington; *Essex*, North Weald, Bassett; *Kent*, Deal. Of Group II: *Surrey*, Kew, Kingston, Reigate, Godalming (2); *Middlesex*, London, Ealing, Enfield Chase, Sunbury; *Herts.*, Braughing; *Oxford*, Dorchester; *Essex*, near Dunmow; *Sussex*, near Milton Regis.

occur, in equally good condition, between 96 and 99 grains; specific gravity varies between 14.5 and 15.5. Analysis of one coin has shown a gold content of



69.7 per cent.¹⁸ The map of find-spots, Map II, does not show many single specimens found in this country. On the other hand, hoards have been found which are composed entirely of these coins; at Higham near Rochester, for example, 11 specimens were found in 1912 in a hollow flint; a find at Haverhill (Essex) contained 50 coins which were perhaps all of this type, but this is doubtful. The Westerham find had one only in a hoard of British coins; at Ryarsh in "the Golden Piece" only one has been recorded so far as I know; in the hoard found somewhere in Essex there were two of these staters.

¹⁸ *Num. Chron.*, 1927, p. 372.

Perhaps the comparatively rare discovery of Atrebatic staters in England is due to the short period of time for which they were in circulation here before another coinage came over from Gaul. This slightly later coinage differs only from its predecessor in having a plain designless obverse and in the more cupped form of the coins [Pl. XI. 9; Evans B 8]. The reverse design does not differ except perhaps in its harder and thinner style; the form of exergual ornament, which is but rarely visible, shows variety, but no variety of it is, so far as I can judge, peculiar to either of the two series. These coins with plain obverse have been attributed to the Morini, a coastal tribe of Belgic Gaul the boundaries of which, indeterminate on the north-eastern side where it marches with the Menapii, are adjacent to the Ambiani, Atrebates, and Nervii. Hoards and single specimens seem to be scattered widely over Belgic Gaul, chiefly in the territory of the Morini, Atrebates, Nervii, Bellovaci, and Suessiones; but the triangular site, Bavai-Orchies-Amiens, which is said to be drenched with these coins,¹⁹ lies mostly in the tribes of Atrebates and Nervii. The weight of the coins is slightly lower than their predecessors; it usually falls between 96 and 98 grains, with specific gravity usually 13.5-14.5. No quarter-stater is known.

I can see no reason for assigning the "Morinic" staters to a different tribe from that which issued the coinage with obverse design; the attribution of the latter to the Atrebates is now generally accepted, and I know no reason to doubt it; I should therefore look upon the coins with typeless obverse as a later and

¹⁹ Blanchet, *op. cit.*, p. 347 note.

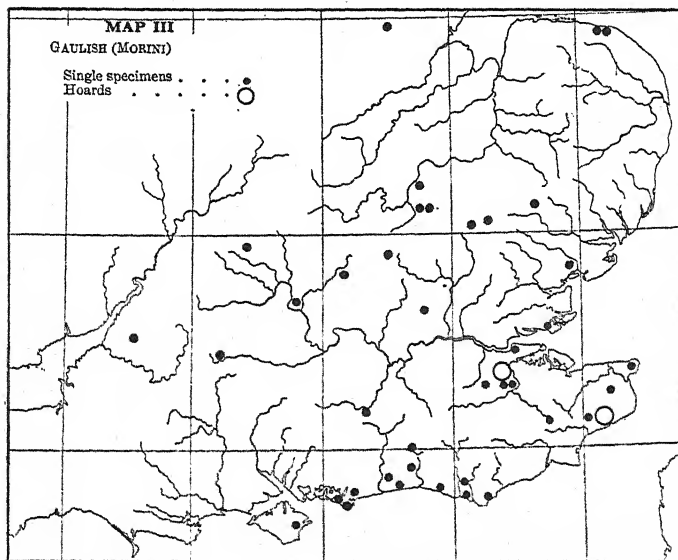
a natural development of coinage by the Atrebrates. The removal of the obverse type is not unknown elsewhere; in the British Remic coinage (see below, p. 128), for example, we find obverses with and without design used with the same reverse type. It probably resulted from the use of an obverse die so long that its design was nearly worn away and became illegible on the coins; the lazy habit was then easily indulged of making plain dies for the obverse.²⁰ Mr. Hawkes²¹ has pointed out that the Morini were a backward people with a high proportion of German blood, whom Marne culture had failed to reach; that they should have issued a coinage is *prima facie* unlikely. I have, for the convenience of nomenclature, retained the term "Morinic" for the coins, but I have little doubt that they would be more correctly defined as Later Atrebatie.

The "Morinic" coinage is more frequently found in this country than the Atrebatie (Map III). It is the dominant type of the Ryarsh hoard, where it was probably found in large numbers with some of the Atrebatie coins; at Folkestone in 1877 a small deposit was found of six coins of this type only; in a find somewhere in Essex, of which I have more to say later, there were 29 Morinic staters. Single specimens are thick along the Sussex coast, and in Kent; a few are found on the coast of Essex; the Thames valley has scarcely produced a single specimen except at the farthest points of its northern tributaries, whence they have reached the higher ground almost on the line of

²⁰ The use of one obverse die with gradually disappearing design is noted in *Num. Chron.*, 1927, p. 373.

²¹ Hawkes and Dunning, *op. cit.*, pp. 233-4.

the Ickneild Way, while a small batch of find-spots lies on the other side of the hills by the waters of the Great Ouse not far from Bedford. It is also worth



noting that there is a tendency for the coinage to circulate towards the Eastern counties. If we compare Maps II and III we find that there is scarcely a single Atrebatian find-spot which has not its "Morinic" counterpart on Map III.

It is the earlier and, not only in England but also in France, the rarer of these two issues which formed the prototype, as we shall see, of the earliest British coinage. It is also the first coinage of Belgic Gaul which survives in hoards deposited in this country during its currency. It is therefore the coinage of the first Belgic invaders, circulating among the early settlers in Britain about, perhaps shortly after, 75 B.C. It was already being imitated in this country when it

was superseded in Gaul by the later issue with plain reverse. Its comparative rarity is probably explained by the short period of its issue, and therefore of its currency in Britain, before it was superseded by the similar coinage which bears no obverse design. But the so-called Morinic coinage, though it soon took its place, failed to influence the Belgae in Britain to follow its example in the lazy use of unengraved obverse dies. The conventional head was adopted by the British from the Atrebatie coinage; their conservatism in respect of the obverse design is seen in the coinage of the Second Belgic Invasion,²² which retains the obverse of the First Invasion type.

The Coinage of the First Belgic Invasion (British Atrebatie type). The earliest coinage struck in Britain [Pl. XI. 10, 11; Evans B 4, 6] is a very close copy of the Atrebatie stater. The obverse is hardly to be distinguished from that of the Gaulish prototype. The reverse design is broken down; it is carefully copied and reproduces very adequately the various sections of the disjointed horse, but the die-engraver, though faithful in copying the component parts, reveals a lack of the technical knowledge of die-engraving. The horse is turned to left instead of right, and the parts of it hang loosely together without forming any complete figure. The straight fore-leg, the beak-like face [see Pl. XI. 10], the lines or crescents, which are used for the neck, for the body, and for the upper parts of the legs, are the same, but they are out of position, and the horse stands stiffly at rest, its body completely out of joint. The charioteer-ornament

²² See below, p. 128.

above the horse [see Pl. XI. 9; it is not clearly visible on no. 8] has been degraded into a mere group of pellets; the eye-ornament, the relic of a chariot-wheel, remains below the horse's tail with three curved lines below it which perhaps represent the second wheel, but these curves are linked with the hind leg to form an object like a small fence or a three-barred gate. The exergue has a zigzag pattern (angular, not curved) between two straight lines.

The weight of the coinage of this group seems to be much the same as that of the Gaulish Atrebatas, which it copied. One coin in the Westerham find weighed just over 102 grains, but they are rarely so high as 100 grains; the majority turn the scale between 96 and 99 grains. The specific gravity is usually between 13.5 and 14.5, which is a point lower than that of the Gaulish Atrebatas coins.

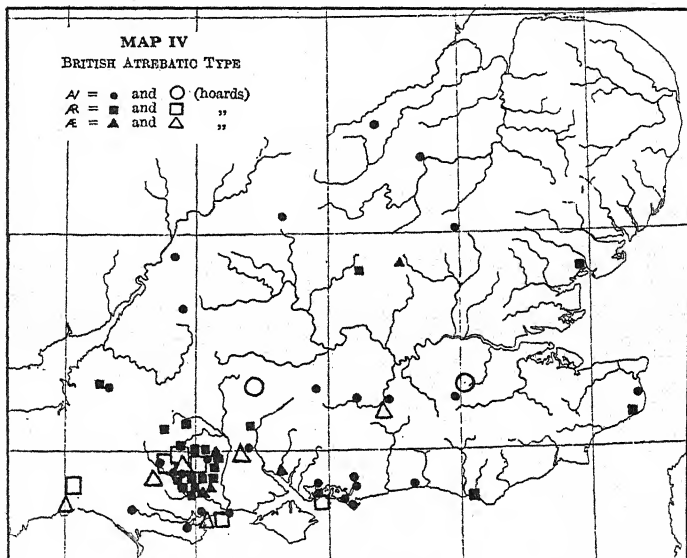
The area of distribution (marked by round spots²³ on Map IV) is, like that of the Gaulish Atrebatas and "Morinic" coinages, outside the Thames Valley to north and west (at Royston, Oxford,²⁴ Huntingdon, and Cheltenham) and along the line of the upper reaches of the Wey and the Mole (at Basingstoke, Farnham, Guildford) and at Horne, at the west border of Surrey, and also on the South Coast. At Westerham²⁵ a hollow flint was found which contained twelve of these coins with one of the Bellovaci and one of the Atrebatas. There were also specimens in the Carn Brea (Cornwall) hoard, and five were in the hoard from Essex.

²³ The map does not distinguish the ordinary gold coins from the later variant described below.

²⁴ Omitted from the map.

²⁵ *Num. Chron.*, 1927, p. 370.

On some coins the reverse type is varied [Pl. XI. 12; Evans B 5]; a crab-like ornament is developed by the addition of four curved limbs to the usual pellet below



the horse's belly. Coins of this variety are lower both in weight (93-95 gr.) and in specific gravity (11.5-13.0) than the ordinary coins of the series. This indicates a somewhat later date of issue. The Chute find²⁶ of 65 coins in a hollow flint was entirely composed of this variety, and single find-spots are marked at Kettering, Swalcliffe²⁷ near Banbury, Tetbury, East Harptree (Somerset), Dorchester, the Kent coast, the Cranborne Chase region (all the gold find-spots in this district represent coins of this variety), and some of the South Coast sites; one specimen is recorded

²⁶ *Ibid.*, p. 374.

²⁷ Evans, apparently in error, Swancliffe.

by Evans as having come from the Whaddon Chase hoard.

We have also a very large series of coins struck in silver of varying baseness [Pl. XI. 13; Evans F 1-3] and in copper [Pl. XI. 14; Evans G 5, 6] which bear the same type on both obverse and reverse as the ordinary gold coins. The distribution of the silver and copper coins is concentrated in the Cranborne Chase and Hengistbury districts and very few hoards or single specimens have been found elsewhere (they are indicated by square and triangular markings on Map IV). In the Hengistbury excavations, where both the silver and copper coins were found in large numbers, Roman coins extended down to the reign of Hadrian; and it was at Hengistbury that the extreme degradation of the type appeared in the series of cast copper coins [Pl. XI. 15] upon which the head and the horse by a process of degradation suffer complete extinction, and nothing is left but a group of pellets on either obverse or reverse. At Timsbury copper coins were found with Roman copper, of which the latest is of A.D. 86. The silver coins usually weigh between 75 and 90 grains, but some of coarser workmanship weigh between 60 and 70; copper are usually from 40 to 50 grains, but some specimens are as high as 65 and even 70.

We have already seen that in this group we are dealing with a coinage which covers a long period of time; although the type remains but little changed except in the very late copper issues, the gold coinage undergoes some loss of weight and quite a material diminution of standard, and finally it is reduced to a silver and a copper coinage at least in one part of the country, the Cranborne Chase and Hengistbury district.

In this region the silver and copper mingle with Roman coins of the latter part of the first, or even of early second century A.D. If we attempt to distinguish on the map the earlier from the later gold (i.e. no. 12 from nos. 10 and 11 on Pl. XI), we are left with a very scanty and wide distribution of early gold which does not yield much information. All one can say is that, apart from the South Coast specimens, the earlier coins seem to spread away from the Thames valley both north and south (see above, p. 108). The later variety of gold [Pl. XI. 12; Evans B 5] is similarly vague in the evidence of its find-spots; it is doubtful whether we should regard this variety as based on the Cranborne Chase region, for though single specimens have been most frequently found there, this may be due to frequent excavation in the area. There can, however, be no doubt that this was the centre of the silver and copper coinage. A study of the map of find-spots might suggest that the coinage was in its early stages that of a native population, which was thrust over the hills to north and south by Belgic immigration along the Thames valley. To accept this view would be to misunderstand the coinage; the find-spots must not be read as marking coins made at different places in imitation of Gaulish coins that penetrated these districts.²⁸ The uniformity of type and workmanship of the gold coins allows no escape from the conclusion that, in spite of their wide distribution, the specimens all emanate from one mint. Further, there is one

²⁸ It is also desirable to remind those who compare maps of coin-provenance with maps showing finds of other archaeological objects that coins are very mobile and pottery and other objects are not.

point which is, in my view, decisive against the attribution to a pre-Belgic people. Its most remarkable feature is its survival in base metals right down to the time of Roman conquest on the border of Dorset and Hampshire. This part of the country was undoubtedly subject to Belgic invasion, though perhaps later than most districts;²⁹ though pedestal urns are rarely recorded, bead-rim bowls are numerous,³⁰ and it is rich in late Belgic fortified sites.³¹ This type of coin, if pre-Belgic, could not have survived an invasion of Belgic culture. It did survive, and in the first century A.D. it proved, as may be seen by comparison of Maps IV and VII, an effective barrier to the southward circulation of the contemporary currency of the Dobuni, the tribe centred in the Cotswolds.

So far as the coins above are concerned it would be natural to regard this district on the border of Dorset and Hampshire, which was the centre of the iron currency bar circulation,³² as the minting centre also of the earliest British gold coins. But this would mean that the first Belgic invaders used the Hampshire waterways as well as the south-east coast for their

²⁹ See Hawkes in *Antiq. Journ.* xii (1932), map on p. 415.

³⁰ See Hawkes and Dunning, *op. cit.*, pp. 295 ff., 325, 330. Mr. Hawkes places the conquest of this district as late as the first century A.D., and quotes Evans as saying that it had no coins at all. Evans's statement is that there was no *inscribed* coinage. In any case the coinage is perplexing.

³¹ R. E. M. Wheeler in *Antiquity*, vii (1933), p. 34. These late fortified sites show a defensive system on the western fringe of the Belgic settlements; cf. Dr. Wheeler's map with the most westerly find-spots of coins on my map no. VII and the concentration on my map IV.

³² E. Wyndham Hume, in *Antiquity*, vii (1933), pp. 61 ff., argues that they are not currency bars but sword-mounds. His argument does not carry conviction.

entry into Britain, and archaeological evidence is apparently definite in assigning the conquest of the region west of the Avon to the second invasion.

It is unsatisfactory that we should remain so uncertain of the history of this coinage, which is the earliest issued in Britain, though it has very special features which should, if rightly interpreted, lead to some definite conclusions. Let us summarize the known facts of the three separate issues:

- A. Gold coins as Pl. XI. 10, 11 (Evans B 4, 6):
 1. They were struck in Britain; so far as I know they are never found in France.
 2. They are the earliest British coins.
 3. They were struck by a Belgic people.
 4. They closely imitate a coinage of Belgic Gaul, distribution of which in Britain is mostly in Kent.
 5. Their circulation similarly reaches a few spots north of the Thames and on the Sussex coast but, unlike that of their Gaulish prototype, lies also south of the Thames along the Surrey Hills to Basingstoke.
- B. Gold coins as Pl. XI. 12 (Evans B 5):
 1. In type and style they differ from A only in the ornament below the horse.
 2. They are lower in weight and in specific gravity, and therefore later than A.
 3. Their circulation is almost entirely in the western part of the map, especially in the Cranborne Chase area.
- C. Silver and copper coins as Pl. XI. 13, 14 (Evans F 1-3, G 5, 6):
 1. Their distribution proves the border of Dorset and Hampshire to be the centre of the coinage.
 2. Though distribution links them with B, they take A, not B, as their type.
 3. The Durotriges, in whose territory they were coined, did not succumb to Belgic conquest before the second Belgic invasion.

From these data I should conclude that the coinage is a coinage of Kent. Not only is that the chief centre of the circulation of the Gaulish prototype, but both geographically and archaeologically Kent is the most likely centre for the earliest gold coinage. Though find-spots give little or no support, at least they are not adverse; the Westerham find must not be given too much weight, but for what it is worth it bears out this attribution, the more strongly for the fact that all the twelve coins of this type are from the same obverse die and from only seven different reverse dies. The specimens found near Portsmouth, near Farnham, and near Guildford are from one obverse die, the first two being also from the same reverse die.

This attribution to Kent leads, I think, to the conclusion that the Belgic conquest of the Durotriges, or rather of the eastern portion of their territory, was made not by Belgae from Gaul but by Belgic emigrants from Kent. I am at a loss to find any other explanation for the reappearance of a coinage of Kent in this corner of Hampshire, Wiltshire, and Dorset in rather baser gold and also in silver and copper. For the attribution of the gold coins, class B, to the west seems to be very strongly indicated by the Chute find and by provenance of single specimens. The sixty-five coins found in the hollow flint at Chute were struck from only seven obverse dies and twenty-eight reverse dies; they can hardly have travelled far from their mint before burial. The specimen found at Sturminster Newton is from the same obverse die as some of the Chute coins; that found at Ashley near Winchester is a die-duplicate of a Chute coin.

In the latter half of the first century B.C. the family

of Commius occupied Surrey, Sussex with the Hampshire border, and Kent (see Map IX on p. 135); Kent fell into the hands of Eppillus, whose coins are not found elsewhere than in Kent north of the Weald. Kent was the first centre of Belgic conquest and its Belgic population remained untouched by the second invasion, which entered Britain by the Hampshire waterways;³³ but it suffered disturbance when the Commius family established themselves in the country south of the Thames and east of Southampton Water. The conquest of Kent by Eppillus, which is clearly indicated by the coins, must have displaced some at least of the older inhabitants. If I am correct in regarding as a coinage of Kent the first British gold coinage, its revival in base metal in the Dorset region is a natural consequence of that conquest; the Belgic emigrants from Kent followed a trade route already marked by a scattering of the early gold coins around Southampton Water and Poole Harbour. Possibly some peculiar archaeological features of this district, such as the Hurstbourne Tarrant burial, may find explanation in this migration.³⁴ But this is a matter which the archaeologists must decide. I can only say that the coins point to such a migration from Kent to Dorset late in the first century B.C.

Coinage of Pre-Belgic Tribes in the Eastern Counties.
There may be found scattered among the plates of

³³ Hawkes and Dunning, *op. cit.*, pp. 288-91. See also below, pp. 127-33, and Map VII.

³⁴ See Hawkes and Dunning, *op. cit.*, p. 308, where a link with South-Eastern Britain is suggested by the Hurstbourne Tarrant pottery. Excavations at Jordan Hill, near Weymouth, have also produced irregular pedestal urns which indicate the same connexion with Kent; they may be seen in Dorchester Museum.

Evans's *Ancient British Coins* certain gold staters which resemble, some nearly, others more remotely, the Gaulish and British Atrebatian coins. They have distinctive features which separate them from the ordinary coins of either series and which connect them together into a more or less homogeneous group.

<i>Evans plate</i>	<i>Wt.</i>	<i>Sp. grav.</i>	<i>Provenance</i>
C 2	91-96	12.0, 12.1, 12.9	Diss (Norfolk). [Pl. XII. 3.]
C 3	88-89	10.8, 11.3	Norwich, Mark's Tey (Essex). [Pl. XII. 4.]
A 9 ³⁵ , K 12	95	13.0	Ixworth (Suffolk), Shefford (Beds.). [Pl. XII. 5.]
B 1, K 4	93, 96	12.2, 12.6	Lincoln, Brumstead (Norfolk). [Pl. XII. 6, 7.]
B 2, K 6	89-94	11.8, 12.1, 12.3, 12.4	Norfolk (2 separate), Bourn (Lincs.), Waddingham (Lincs.). [Pl. XII. 8.]
K 3	94.5	12.6	provenance not known. [Pl. XII. 9.]
A 12	93, 95	12.5	Southbourne (Hants.), Whaddon Chase hoard. [Pl. XII. 10.]

³⁵ The coin described by Evans, p. 55, from Ruding, Pl. I. 15, as a coin of this type, weighing 103½ grains, is a Gaulish Atrebatian coin and weighs 105.7 gr. (*Hunter Catalogue*, vol. iii, p. 715, no. 13, and Pl. Cl. 23).

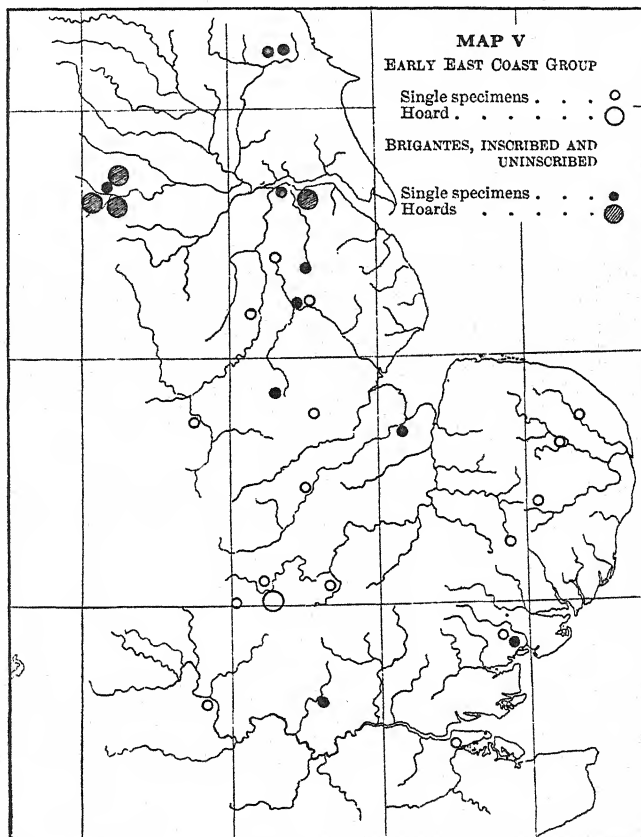
A 11, A 13	90.5-94	12.0, 12.5, 12.8	Loughborough, Buckingham. [Pl. XII. 11.]
A 10	93	12.5	provenance not known. [Pl. XII. 12.]
K 5	98 (?)		Sutton-on-Trent (Notts.).
K 8	90	12.0	Wallingford (Berks.). [Pl. XII. 13.]
K 7	93.7	12.3	Oundle. [Pl. XII. 14.]
C 1	87-93	12.0, 12.1	Coast of Yorkshire, Whaddon Chase hoard. [Pl. XII. 15.]
K 11	84-86		S. Ferriby hoard.

The coins are not placed in a strictly chronological series; one can distinguish early and late coins of the group, but there is not sufficient evidence for assigning each variety to a definite position; indeed, the varieties may in some cases be local rather than chronological, C 2 and C 3 for example clearly represent a local divergence of style. Throughout the series may be traced a general treatment and technique displaying more freedom than the stiff and rather unintelligent copying which produced the British Atrebatian series. In the first place there is a definite attempt to produce a horse in movement. The horse copies that of the Gaulish Atrebatian staters, or perhaps more definitely that of the later, so-called Morinic, coins with their harder technique; but it is not slavishly copied piece by piece so that the complete figure loses its resemblance to a horse. The feature that has caught the copyist's eye is the curve of the horse's back, which is already exaggerated on the Morinic coins and

emphasizes the galloping motion. This tendency increases through the series, except in the Norfolk coins C2 and C3; and the engraver becoming conscious of his lack of realism persuades himself that the crescent on the rump, which seems originally to have represented a tail, must form part of its back and places it over the saddle. This starts the degradation of the horse; gradually the component parts of its body are tied up in an entangled knot, and by this entangled form of horse the latest coins of this group are linked with the Brigantian coinage. Brigantian staters weigh $83\frac{1}{2}$ to 87 grains (uninscribed), and 80 to $83\frac{1}{2}$ (inscribed); their specific gravity is 10.5–11.5 (uninscribed) and 10–11 (inscribed).

The obverse design undergoes different development. On this side of the coin it is the angular features rather than the curves of the Gaulish Atrebatian design that have attracted the copyist's attention. He has therefore made the leaves of the wreath of oblong shape, instead of oval; the large crescents in front of the wreath, though retaining their curved back, are angular on the inner side. The tendency of the Gaulish design to end in a hard outline where the face should be is developed in this series into a straight line drawn in front of the large crescents, with small crescents or other ornaments beyond it resulting from the Gaulish misconception of the features. There is also a vogue for the rosette ornament, often below the horse and sometimes also [Pl. XII. 8, 14] in the obverse design. The curved drapery is straightened out and becomes an exergual pattern, which on some coins [Pl. XII. 15] is transferred to the reverse. These peculiarities repeat themselves in their most pro-

nounced form in the coins, both inscribed and uninscribed, of the Brigantes [Pl. XII. 16]. The leaves of the wreath have there become widely separated oblong



blocks or labels, turned upwards above the diadem and downwards below it, a meaningless arrangement which is found on almost all the coins of the Eastern Counties group. The large crescents have cast off their inner, angular outline, which now appears as a separate ornament in lower relief; the straight line is retained,

when this part of the coin is visible, where the face should be, and a trace remains of crescents, &c., beyond it. The rosette below the horse becomes a large star. On a few coins, which come from the South Ferriby find, may be seen a sort of banner above the horse; this can only, I think, be derived from the similar, but larger, object on coins of the Parisii. On Map V the distribution of the Eastern Counties group is compared with that of the Brigantes. From it are omitted the "Nameless" find from somewhere in Essex, a specimen of Evans C1 from the coast of Yorkshire, two of B2 (separate) from somewhere in Norfolk, one of A 12 at Southbourne (Hants); also two specimens (separate) of Brigantian coins from somewhere in Lincolnshire.

In *Num. Chron.*, 1919, pp. 172 ff., Sir George Hill described a hoard of Ancient British coins which had been kept together, apparently intact, in the collection of Sir John Evans, and came to the British Museum when Sir Arthur Evans generously presented to the nation his father's collection of Ancient British coins. No information was available of the provenance of the hoard; it was not known whether it was found in England or on the Continent. The contents of the hoard were:

- 2 staters of the Bellovaci³⁶
- 3 early Gaulish quarter-staters (Hill J)
- 2 Gaulish Atrebatie (Hill C and D)
- 29 Gaulish "Morinic" (Hill H)
- 5 British Atrebatie (Hill F)
- 12 similar, but with rosette below horse (Hill G)
- 58 similar to Gaulish Atrebatie, but with distinctive features (Hill A, B, E)

³⁶ The doubt expressed by Sir G. Hill of their forming part of the hoard was due only, he tells me, to their seeming out of place. They are not unnatural stragglers.

The peculiarities of the 58 coins in the last group [Pl. XII. 1, 2] are the general fabric of the coins, their wider spread, more cupped form, and harder technique; in fact, their resemblance, save for the obverse design, is nearer to the "Morinic" class. The tail crescent of the horse tends to come forward to the saddle, and the horse has a strongly curved back; the leaves of the wreath are oblong, not oval. Coins of group G have specific gravity between 11.7 and 12.7; group A 10.7-11.5; group B 10.5, 10.8; group E 11.7, 11.8, 11.9.

These coins, it appears, form a definite link with the group of coins which we have assigned to the Eastern Counties and in which we have traced the origin of the Brigantian currency. The hoard is composed of about 30 per cent. of Gaulish coins; approximately 50 per cent. of the coins show in their earliest form the peculiarities which develop in the Eastern Counties. Five coins only are of the ordinary British (Kentish?) issue, and a dozen approximate to that type.

In 1907³⁷ Bernard Roth described a hoard of the so-called Morinic coins which had been found in France, between Rheims and Châlons, two years previously; in doing so he had occasion to communicate with Sir John Evans, whom he quotes as saying: "I have seen a hoard, I think from Essex, in which there were some thirty of this type." So far as I am aware no find has been recorded in this country which contained even approximately this number of Morinic coins; the "Nameless" find, however, was in the possession of Sir John Evans and contained twenty-nine specimens of the type in question. Though all trace of the

³⁷ *Brit. Num. Journ.* iv, pp. 227 ff.

provenance of the hoard had been lost when the coins came to the British Museum, it is hardly possible to resist the conclusion that this was the hoard which Sir John Evans had in mind when he wrote that he had seen a hoard from Essex containing some thirty Morinic coins.

If this conclusion is correct, it throws interesting light on the origin of the Eastern Counties group. The proportion of Morinic coins to Atrebatie was very high (29 to 2), and it is evident that this later coinage had already supplanted its predecessor in Gaul for some time. Yet the coinage that sprang into existence in the east of Britain appears to use the earlier, the Atrebatie, as its model. In truth, it does so in appearance only. As we have seen above, the obverse design of the Atrebatie coins had been adopted on a British coinage and was therefore retained. In the Eastern Counties group it seems that the influence came mainly from the "Morinic" issue, but also to some extent from the British coinage which was already issuing, probably in Kent. The twelve coins of the "Nameless" find (Hill G) which resemble the British Atrebatie coins suggest the work of a copyist not only in the insertion of the rosette but also in their coarse workmanship; they were all from the same obverse die. The significance of the hoard is its indication of a coinage starting, probably in Essex, in imitation of the "Morinic" coinage of Belgic Gaul and of the new currency of the Belgae in Britain. This coinage set on foot a progressive series of imitative issues in a northward direction; perhaps a mint was established in Norfolk or Lincolnshire which provided currency in the eastern part of England, among pre-Belgic tribes, until the later coin-

ages developed in the first century A.D. among the Brigantes and the Iceni. It is difficult to separate from Norfolk the isolated issue (C 2, C 3) which turns the horse into a wolf-like quadruped; this particular development comes early in the series, for it retains almost intact the features of the Atrebatie obverse design. Its appropriation to Norfolk seems assured by the constant Norfolk provenance of the coins. It is curious that it leaves no trace in the Icenic coins; but it must be remembered that a long interval of years intervened before the Icenic coinage began. The general distribution of the Eastern Counties coins lies in a north-westerly direction from, say, Colchester, and perhaps the centres of its issue may be sought first at Colchester and later in Lincolnshire or Yorkshire, with the Norfolk group as an isolated offshoot. But to find mints for the coinage is purely conjectural; it may have been made at one mint or at many. The one thing clear is that it represents a coinage of the middle and the second half of the first century B.C. which formed the model for, or rather developed into, the uninscribed, and, later, inscribed, coinage of the Brigantes.

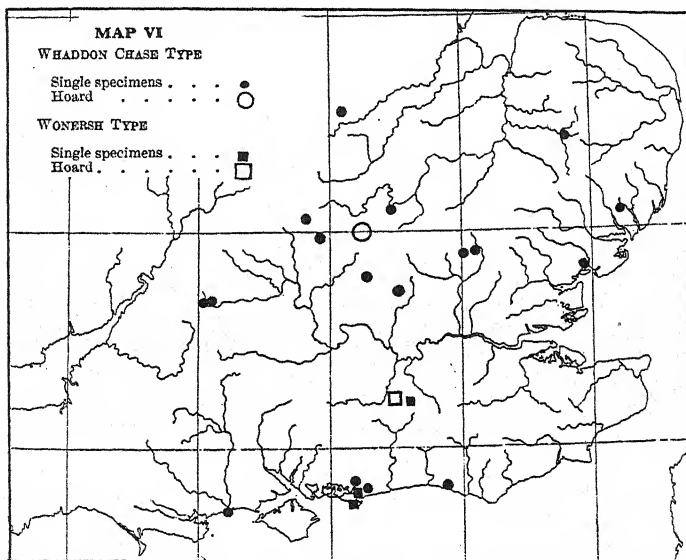
The Coinage of Cassivellaunus (Whaddon Chase type).
We have already seen that the earliest British coinage, which I have labelled the British Atrebatie coinage from the supposed tribe of its parent issue in Gaul, was probably struck by the earliest Belgic settlers in Kent; it spread in circulation not only south of the Thames, but it has also left specimens north of the Thames which have been found at Oxford, Royston, and Huntingdon. Within a triangle joining these three find-spots lies the site of a hoard of coins found

in 1849 at Whaddon Chase. A large number of the coins were scattered, but as many as 320 were collected and described;³⁸ of these the large majority were of the type which has consequently come to be known as the Whaddon Chase type. It is easy to trace on this coinage [Pl. XIII. 1; Evans C 5-7] the development, on the obverse at least, from the British Atrebatian type. The main features of the obverse design of that coinage are retained, namely, the vertical division of the field by the wreath, the horizontal division of it by the diadem, the locks of hair, the large crescent-shaped curls, and the drapery that originally hung from the shoulder. These features had long lost their meaning and were now assembled into a regular cruciform pattern; the wreath and diadem form the cross and in its angles are set two locks of hair, a pair of crescents set in a square frame, and the piece of drapery. The development of one design from the other is quite evident, though on the reverse the horse is now treated with originality and realism; it is a spirited little figure, the first appearance of British art on a coin. With the new horse is retained the familiar "eye-ornament" in the field, both by the horse's face and below its tail. One interesting point is the use of the same conventional form as appears on the obverse for a lock of hair to represent either the old "charioteer-ornament" or a wing over the horse's back.

The weight of the coins is between 89 and 92 grains and their specific gravity varies between 12.5 and 13; that is to say, the issue shows a distinct drop in both weight and standard from the British Atrebatian type,

³⁸ *Num. Chron.*, 1850, pp. 1 ff.

but differs very little in those respects from the later Atrebatian coins (B 5) of the Chute find. There is a spread of the coins (Map VI) along the country from



the head of the Thame to the head of the Lea, and others are widely scattered to north, east, and west; one specimen found somewhere in Oxfordshire is omitted from the map. South of the Thames none have been found except in the inevitable coastal spots.

The other type represented on the same map is a derivative of it [Pl. XIII. 3; Evans D 6-8] which has been very rarely found except in the Womersley hoard of 1849. It is probably a southern issue, for certain characteristics³⁹ reappear on the coins which are

³⁹ The large sun above the horse, for example. The knobbed pole jutting out from the horse's shoulder may well be derived from the little boss or rosette on the Womersley coins.

derived more directly from the British Remic type and are seldom found except on the Sussex coast [Pl. XIII. 4, 5; Evans E 1-3].

The Whaddon Chase type undergoes some development in the course of its issue; not only is there variation in the symbols below the horse, pellet, rosette, or in some cases a wheel,⁴⁰ but the obverse type is also modified (Evans C 8-10). The wreath and diadem lose their individual character and each becomes a double corded line; later, one of the two is set in a curve and the ornaments in the angles are altered, the lock of hair becoming a sort of double-wing ornament [Pl. XIII. 2]. This obverse is also found on the inscribed coins that bear the name Andoco - - [Pl. XIII. 6], and on the earliest gold coins of Tasciovanus [Pl. XIII. 7]. The development from the Whaddon Chase issue to the gold coinage of Tasciovanus confirms the view, suggested doubtfully by the find-spots on Map VI, that the district near the headwaters of the Lea is the central point of the Whaddon Chase issue. Even if the "Ricon" and "Sego" coins of Tasciovanus denote his use of supplementary mints, Verulam was beyond doubt his chief mint and a very prolific one; and the distribution of his coins is most crowded in the Hertfordshire-Buckinghamshire region with drenched sites at Verulam and Braughing and at Great Chesterford.



The Whaddon Chase coinage, therefore, is a currency of the Catuvellauni which preceded the reign of Tasciovanus and, perhaps, that of another king Andoco - -. It will be remembered that, as Evans

⁴⁰ Showing influence of the British Remic type; that coinage was included in the Whaddon Chase hoard in the proportion of about 1 to 3.

says, "it has been suggested that possibly the Cassivellaunus of Caesar may lurk disguised under the Tasciovanus of coins; but such a supposition involves considerable chronological difficulties, as the coins bearing this name can hardly be of so early a date, and were it the case, we should have the father a chieftain in B.C. 54, and the son reigning down to nearly A.D. 43". There can now be no doubt that the coinage of Cassivellaunus was the uninscribed coinage which formed the bulk of the Whaddon Chase hoard. The other type which formed a large proportion of the hoard, nearly one-quarter of the total number described, was the type which I am about to describe as the British Remic type, and this is in agreement with a date somewhere about the middle of the first century B.C. for the deposit of the hoard.

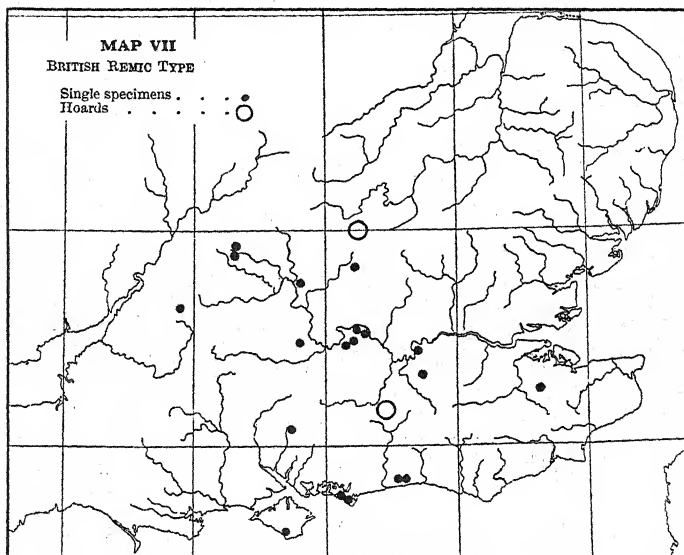
The Coinage of the Second Belgic Invasion (British Remic type). The familiar uninscribed coins which are characterized by the triple-tailed horse with a wheel below it [Pl. XIII. 10, 11; Evans B 9, 10] have their origin in a coinage of Belgic Gaul which is doubtfully attributed to the Remi [Pl. XIII. 8, 9]. The reverse of the Gaulish and British coinages is, to all appearances, identical, and I doubt whether it is possible to tell them apart; but the obverse of the coins found in France⁴¹ has always a very characteristic design. Between the wreath and the upper of two large crescents is a large V-shaped ornament with an eye-ornament

⁴¹ I only know of one specimen of the Gaulish coins having been found in England, at Whaddon Chase, perhaps in the hoard. One in Dorchester Museum has no recorded provenance. The British series never, so far as I know, turns up in France.

between its limbs; on coins that are sometimes attributed to the Treviri this peculiar device ousts the ordinary design and itself occupies the whole of the field; it therefore plays an important part in the typological development of the coinage, and it is essentially a characteristic of coinage of Belgic Gaul. The similar coins found in Britain are often without any obverse type, but those that have a design seem to adopt the Gaulish obverse as their model but deliberately to refine it down to a close analogy with the older design of the British Atrebatian coins. The individual features of the design are like those of the Gaulish coins; the wreath is curved slightly towards the face, the large crescents are linked to each other, the locks of hair are like those on the Gaulish Remic coins () not in the style of the Atrebatian () ; the drapery has herringbone, not pellets, between three lines. Nevertheless, the most prominent feature of the Gaulish coins, the V-shaped ornament, is omitted, and by this omission the design is in general appearance nearer to the British Atrebatian obverse. But perhaps it would be more correct to say that this feature is not omitted, but subordinated; for there now appears, between the drapery and the lower of the two large crescents, a little snake-head upon a stem attached to the lower crescent, and this may, I think, be suggested by the Gaulish device. To this extent the British Remic type pays deference to the conservatism of British coinage, but it soon succumbs to the influence of the "Morinic" coinage sufficiently to produce many specimens with plain obverse.⁴²

⁴² This does not seem to be a local development, as the coins

The Gaulish Remic coins seem to be very rarely found in England. The weight of the coins is from 92 to 94 grains and occasionally over 95. The specific



gravity of four specimens in the British Museum is 12.8, 12.9, 13.6, 13.7.

The British Remic coins vary considerably in weight, the majority being between 89 and 92 grains, with a few late specimens of lighter weight (about 82 grains); a few reach 94 to 95 grains. The specific gravity is 12.5 to 13.5, except the later, light, coins (11.1, 11.9, 12.1). Specimens have been found (Map VII) along the south bank of the Thames between Maidenhead and Reading

with and without obverse design are evenly distributed. Though those with plain obverse are later than the earliest that have the obverse design, the latest coins of this class always have the obverse design and they pass it on to the inscribed coins of Commius, &c.



with one only lower on the river, at Walton; there is a group on the upper waters in Oxfordshire. The remaining find-spots are on the coast of West Sussex and East Hampshire, excepting one in the Isle of Wight, one near Winchester, one at Epsom, and one in Kent (Hollingbourne). In the Whaddon Chase find this type figured largely, about 70 were among the 320 coins described; at Womersley it was also represented, but the numbers of this find are not known.

This coinage is based on a newly imported model from Belgic Gaul; it started at a weight of about 95 grains and, it seems, fell quickly to about 90. If we may assume, as I think we must, that contemporary coinages in Britain were struck, or quickly levelled, to the same basis of weight, the British Remic type was appreciably later than the British Atrebatian type; it belongs to the time when the variety (B 5) of that issue appeared but presumably before it carried itself off from Kent to the West. In type it is the forerunner of the inscribed coinage of Commius, who is made the leader and central figure of the second Belgic invasion.⁴³

The coins of Commius [Pl. XIII. 12, 13], which I think we may now accept as correctly attributed,⁴⁴ resemble very closely the British Remic staters. They differ in replacing the locks of hair to left of the wreath by a composition of large crescents similar to that to the right of the wreath; above the horse, in addition to the charioteer-ornament, is a second ornament like a

⁴³ Hawkes and Dunning, *op. cit.*, pp. 291 ff.

⁴⁴ Evans, *op. cit.*, pp. 157 f., was doubtful whether the syllable *Tin* was missing on the few specimens known. A comparison of eight specimens has satisfied me that *Commios* is the full inscription.

leaf composed of three annulets. The horse's face on both the British Atrebatie and the British Remic types copied the Gaulish models which were in this respect alike, namely, a square block joined by two lines to the pellet that represents the eye (); on the coins of Commius it is somewhat like that on the Whaddon Chase type, an annulet, with a small crescent below it, either separate or joined to the eye (). Their weight is almost invariably between 82 and 84 grains, which represents a drop of ten grains from the earliest staters of the British Remic type and finds a parallel in the gold coinage of Tasciovanus. Their specific gravity is 11.5 to 12.0.

The date of the second Belgic invasion, the characteristic feature of which is the introduction of bead-rim bowls, is based on the evidence of pottery and of the political conditions of Gaul in the years 51 to 45 B.C. This is in agreement with the identification of the un-inscribed coinage which I have called the British Remic type as the coinage of the Belgae of the second invasion. The map of coin-provenance does not show clearly whether they reached their settlements by the Thames waterway or by Southampton Water, but the distribution of the coins of Commius and his family (Map IX) seems to indicate that they retained a corridor to the sea by Southampton Water and not by the mouth of the Thames. Archaeological evidence proves that Southampton Water was their line of route. So far the coins conform to archaeological evidence; their weight places them on the standard of the Whaddon Chase, or Cassivellaunian, coinage, which dates them approximately to the middle of the second century B.C.

The coinage of Commius does not fit quite so well the conclusions that have been drawn from the archaeological evidence. The weight, the standard, and the design of the coinage had undergone material modification by the time that the name of Commius appeared upon the coins. This may be explained in two ways; either Commius was not among the earliest immigrants of the second invasion, or his coinage was for a considerable period ⁴⁵ uninscribed. The latter alternative is open to obvious objections as a *pis aller*. His inscribed coins are not found in the same district as the uninscribed (cf. Maps VII and IX). His alteration of the type and of the weight of his coins when he put his name upon them seems an odd coincidence.

We first hear of Commius as king of the Atrebatés in Gaul in 57 B.C. After a period of friendly service to Caesar, he joined the revolt of Vercingetorix and escaped after defeat at Alesia in 52 B.C. From that time he carried on a guerrilla warfare, which was brought to an end by his submission to Antony in 51 or 50 B.C. on the condition that he should not have to meet a Roman face to face again. Frontinus merely relates a story, without any hint of its date, of the escape of Commius to Britain pursued to the coast by the Romans. The account given by Caesar of his submission to Antony is

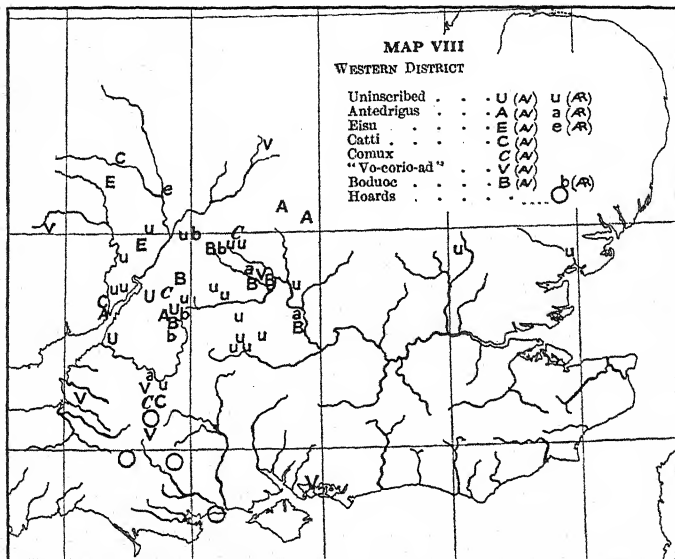
⁴⁵ From their weight I assign his coins to the date of Tasciovanus's reign, whatever that may be. We know, from his borrowing of Roman types, that Epaticcus, son of Tasciovanus, struck coins very little before or after 10 B.C. Both he and his brother Cunobeline may well have been placed in their kingdoms during the father's lifetime. One can only say that the traditional date for Tasciovanus, the last thirty years of the first century B.C., cannot be very far wrong. Therefore we can hardly put the coins of Commius as early as 50 B.C.

hardly consistent with his escape to Britain, at that time, from Roman pursuers. Or, at least, we may say that the two stories are not incompatible with a period of inactivity in Gaul before he again fell foul of the Romans.

Such an interval would hardly bridge a gap of twenty years, between 50 and 30 B.C. But a shorter interval would explain the spread of the British Remic coins, the currency of the second Belgic invaders, into the upper reaches of the Thames before Commius appeared with his sons and settled across the centre of Surrey and on the Sussex coast. He may not have struck coins immediately he established his settlement south of the Thames; but it is hardly likely that he began his issue with an uninscribed coinage.

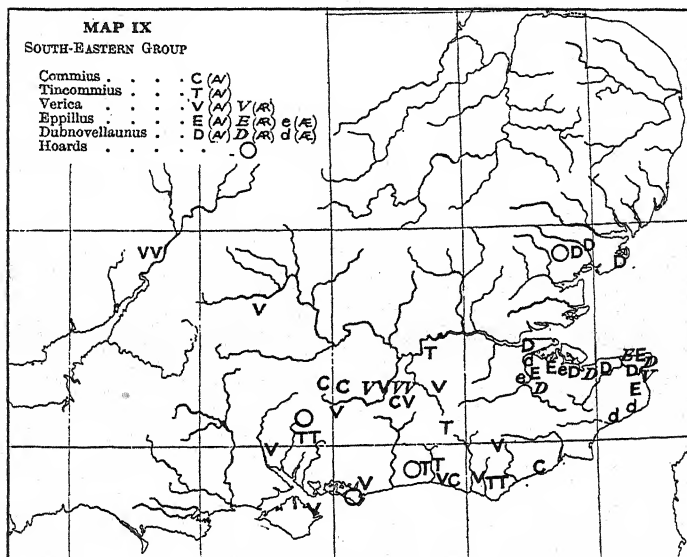
The earlier influence of the British Remic type may be seen in the introduction of the wheel on some late coins of the Whaddon Chase type, and similarly, south of the Thames in the later, Wonersh, type. In close affinity with it is the group of coins, illustrated by two specimens on Pl. XIII. 4, 5 (Evans E 1-3, &c), which is rarely found elsewhere than on the Selsey-Bognor coast; it seems to represent a coinage of settlers in this district which later formed the kingdom of Tincommius (see Map IX). Their preference for the quarter-stater is remarkable; no corresponding staters are known. The coinage seems to take over from the Wonersh type the evolution of the sun-ornament above the horse, and perhaps its characteristic knobbed pole in front of the horse is a development from the little sun or rosette which appears in this position on the Wonersh coins. If this is so, the third quarter of the first century B.C. sees the coinage of the two invasions coming into contact on the South Coast.

The Coinage of the Dobuni. The series of coins which is the subject of Map VIII is an issue in gold [Pl. XIII. 14, 15] and silver [Pl. XIII. 16-18], both uninscribed



(Evans C4, F 6-8, &c.) and inscribed (Evans I 1-9), struck in the Cotswold district by the tribe of the Dobuni in imitation of the coins of the second Belgic invaders. The map shows a circulation of the coins from the head-waters of the Thames across to the Severn valley and southward to the point of Wiltshire, Dorset, and Somerset. A comparison of this map with Map VII shows the commencement of this currency on the fringe of the circulation of the British Remic type which it imitated, and a comparison with Map IV shows the southward limit of its circulation at the point of Dorset, Wiltshire, and Somerset, where it meets the currency of the Cranborne Chase people. The coinage is a late one running down to the middle

of the first century A.D. ; in the Nunney find both gold and silver were in company with Roman coins, of which the latest is of the year A.D. 37. The weight of



the gold staters is usually between 83 and 86 grains. The specific gravity is between 11.0 and 12.0 with a few coins between 10.0 and 11.0. The find-spots in Map VIII show the coins to have circulated westward from the Cherwell to the far side of the Severn and southward to the Kennet and the Avon, with a wedge running down to Nunney, where the large hoard of gold and silver coins was found in 1860; uninscribed gold coins were found at Mount Batten near Plymouth (not marked on the map) and inscribed gold at Sherborne; a few of the silver coins were found in the Hengistbury excavations. In addition to the sites marked on the map, a gold coin of Bodvoc has been found at Dumfries, and one inscribed *Cutti* at Camborne in Cornwall.

It is not my intention here to go into the inscribed coinages except so far as is necessary for tracing the development of the coinages based on the Philippus. But I have introduced Map IX in order to show the spread of coins of Commius and his family, and it is worth while to draw attention to the compact area in which the coins of Eppillus are found. The attribution of the signature CALLE to Calleva (Silchester) on some of his coins is not consistent with this purely Kentish provenance. It is true that up to the present we do not know the provenance of any of the coins that bear the signature, but until some are found in the neighbourhood that interpretation of the signature must be abandoned.

Our conclusions may be briefly summarized. In the first half of the second century B.C. the Philippus was adopted as the gold currency of Rome. From Rome it passed into Gaul as the result of the conquest of the Arverni and Aedui in 121 B.C. and the formation of a Roman protectorate among the southern tribes of Central Gaul. The imitation of the Philippus in Northern Gaul was therefore subsequent to the Belgic conquest, which is dated between 150 and 125 B.C. The early years of the first century B.C. saw the establishment of trade routes in Britain by the South Coast and along the Thames, which carried into Britain coins of a Belgic tribe, probably the Bellovaci. Shortly after 75 B.C. the settlers of the first Belgic invasion of Britain were bringing into Kent and thence distributing in Southern Britain coins struck in Gaul, probably by the Atrebates. Very soon they were themselves

making, in Kent it seems, an imitative coinage (the British Atrebatian coinage). About the same time a similar coinage began in the Eastern Counties which spread northwards and ultimately developed into the coinage of the Brigantes. Shortly before the middle of the first century B.C. a new coinage, based on the British Atrebatian type but converting it into an original design, was issued in the kingdom of Cassivellaunus (the Whaddon Chase type). About the same time the second Belgic invaders were entering Britain by Southampton Water and bringing with them a new Gaulish coin; this they imitated for circulation in their new settlements (the British Remic type). Commius and his son Tincommius used the same type with slight modification, but with a material drop in weight, from which it would appear that an interval elapsed between the coming of the earliest settlers of the second invasion and the establishment by Commius of his British kingdom. The type was copied by the pre-Belgic tribe, the Dobuni, who were adjacent to the north-westerly limit reached by Belgic settlement. Towards the close of the first century B.C. the British Atrebatian coinage of Kent (?) was being struck in base metal in the Cranborne Chase and Hengistbury Head district, and it continued through the greater part of the following century in silver and copper, not as a bimetallic or trimetallic coinage but as a debasement from one metal to another, the same type being used throughout. This removal of the coinage from east to west suggests a migration to Dorset through Poole harbour of the Kentish folk driven out of their country by Eppillus, one of the sons of Commius. The further development of the inscribed coinages, with

the introduction of Roman influence, must remain for later consideration. A survey of the distribution of British coins, which appears in the September part of *Antiquity*, 1933, includes the inscribed coinages and is illustrated by maps on a larger scale.

The coins illustrated are :

- Pl. XI. 1, 2, 3 Gaulish (Bellovaci) Staters and Quarter
 4-7 " " (?) Staters and Quarters
 8 " (Atrebates) Stater
 9 " (Morini ?) Stater
 10, 11 British Atrebatian type *Æ*
 12 " " (Chute variety) *Æ*
 13 " " *Æ*
 14 " " *Æ*
 15 " " cast *Æ*
- Pl. XII. 1-15 Eastern Counties *Æ* (see pp. 115-23 above)
 16 Brigantes uninscribed *Æ*
- Pl. XIII. 1 Whaddon Chase type *Æ*
 2 " " (late variety) *Æ*
 3 Womersley type *Æ*
 4, 5 Sussex *Æ*
 6 " Andoco - " *Æ*
 7 Tasciovanus *Æ*
 8, 9 Gaulish (Remic ?) Staters
 10, 11 British Remic type *Æ*
 12, 13 Commius *Æ*
 14 *Æ* of Dobuni (Comux)
 15 " " (Bodvoc)
 16, 17 *Æ* of Dobuni (Eisu, Anted)
 18 " " (Bodvoc)

G. C. BROOKE.

VI.

A NEW RAJPUT GOLD COIN AND ITS ANALOGUES.



IN his paper on "A Gold Coin of Bappa Rawal" *Num. Suppl.*, xl, no. 273 (*J.A.S.B.*, N.S., vol. xxiii), Pandit Gaurishankar H. Ojha stated that "no other gold coin of any ruler of the various dynasties that held sway over Rajputana from the sixth to the eleventh century of Christ has been found". I have recently acquired what is probably a new and unique gold coin which is no doubt to be assigned to Rajputana. The reverse type of a calf suckling its mother's milk and certain other characteristics enable me to relate it to the coin described by Pandit Gaurishankar. Furthermore I find that the same reverse type as well as certain typical characteristics occur in a gold coin originally described and figured in the *Proceedings of the Asiatic Society of Bengal* by Hoernle so long ago as 1881, at p. 39, and redescribed by R. Burn in *Num. Suppl.*, i, no. 2 (*J.A.S.B.*, vol. lxxiii), and illustrated in Pl. i, 2. The following considerations appear to me to show that these three coins, each probably unique of its kind,

namely, (1) Burn's coin, (2) the coin described by Ojha, which now belongs to the Sirohi Durbar, and (3) my coin, are connecting links in the gold coinage of Rajputana of the eighth century of the Christian era :

1. The size of the coins and their weights are probably approximately the same. The size of my coin is 0.85" and its weight 117 grs. while the size of Pandit Ojha's coin is 0.9" and its weight 115 grs.

2. There is a similarity in the script on the obverse of the coins.

3. The type on the reverse is the same on all three coins, namely, a cow giving suck to her calf. The treatment of the type is, however, individualistic, e.g. in no. 2 the cow faces right and the calf left, while in nos. 1 and 3 the calf faces right and the cow left. The execution is of a high order in no. 3, while no. 2 is inferior to no. 1. Though there can be no question of borrowing it is interesting to note that the motif of a cow giving suck to her calf is a very old one on coins : it occurs on the obverse of certain coins of Coreyra and of Dyrrhachium in Illyria of the sixth century B.C. It is interesting to note also that the motif on the reverse of these coins, namely of a cow giving suck to her calf, appears on the reverse of coins of Vaiśravaṇa and Aṁśuvarman (c. A.D. 640-650) of Nepal of the Thakuri dynasty which claimed Rajput ancestry (*vide* Cunningham : *Coins of Ancient India*, Pl. XIII, 3 and 4). The motif no doubt represents "Kāmadhenu" or the celestial cow which gratified every wish, and above the reverse design on the Nepal coins is the legend : "Kamadihi". (Cf. also the tiles from Harwan on Pl. XXXII of R. C. Kak's *Ancient Monuments of Kashmir*.) The reverse legend on our coin no. 3 cannot be read as it is cut.

4. As regards the obverse design, in all three coins there is a Śivalingam. In no. 1 the bull of Śiva is seated before it, facing left, and there is a man prostrating himself in adoration before the Śivalingam ; in no. 2 also, according to Pandit Gaurishankar (the reproduction itself is unfortunately not clear, due perhaps to the coin being badly worn) there is a recumbent bull before the lingam and below the prostrate figure of a man. In no. 3, a person, wearing a close-fitting high peaked cap, probably the king

in whose name the coin was struck, is represented as worshipping the lingam in a recumbent posture with folded hands. From his neck is suspended by a golden hooded cobra a bowl (containing a miniature Śivaliṅgam?). Like the reverse, the obverse of no. 3 is artistically superior to that of the other two coins.

5. On the reverse of coins nos. 1 and 2 there are two parallel lines, and above stand the cow and calf. It has been plausibly suggested as regards coin no. 2 that the parallel lines represent the banks of a river. On both coins at the bottom about the middle there is a half flower, while in no. 1 there is a flower between the calf and the hind legs of the cow. The parallel lines and flowers as well as the fish and earthen vessels seen on the reverse of nos. 1 and 2 are absent from the reverse of no. 3.

6. All three coins have circular borders of large dots on both sides.

To judge from the photographs, the fabric of all three coins is similar.

The inscriptions on the coins present no little difficulty. The inscription on the obverse of no. 1 was read by Dr. Hoernle as *Śrī-Dhairyyarājā* and by Burn as *Śrī Vigharaha*, but the correct reading is *Śrī-Voppa-Rāja*; that on no. 2 is, as read by Pandit Gaurishankar Ojha, *Śrī Voppa*, while the inscription on no. 3 is probably *Śrī Kasava*, equivalent to *Śrī Kesava*; but as there is no known Rajput king of the period of this coin who answers to this name, the coin must be attributed to a new king called "Kesava". Mr. John Allan suggests that there probably was a vowel mark "e" above "Ka" but owing to imperfect stamping or wear it has disappeared; the name would, therefore, be "Kesava". The letter following *Ka* is *Sa*, so that it is not possible to read the name as *Śrī Kālab(hoja)*, a reading which would have cut the Gordian knot as *Kālabhoja* was a great ruler of Mewar of the Guhila

dynasty, who has been identified by Pandit Gaurishankar Ojha with the famous Bāppā Rawāl (*vide* Ojha: *History of Rajputana*, vol. i, p. 406). Incidentally this would have disproved his statement that no coin of Kālabhoja has been found and, therefore, Kalabhoja must be Bappa. To conclude, it is clear that the three coins belong to the Guhila dynasty of Mewar. Though struck from different dies, nos. 1 and 2 are practically identical in type, except in certain details noticed above. Coin no. 3 is a unique coin of a hitherto unknown king named "Kesava".

AJIT GHOSE.

MISCELLANEA.

UNCIAL DUPONDIIUS OVERSTRUCK ON A SEXTANTAL AS, c. 217-197 B.C.

Obv. Head of Minerva to r. wearing Corinthian helmet.

Rev. Prow to r. ornamented with dolphin; above, mark of value II, below ROMA (only the lower half of the word ROMA remains, the upper portion of the letters having been obliterated during the process of overstriking).

Æ. 1-35. Wt. 715 grs. 46.3 gm. (Lot 273, Hamburger Sale, 6 Oct. 1932.)

Up to about twenty years ago only one example of this dupondius appears to have been known.

The coin in question was originally in the Depoletti Collection at Rome; it then passed into the possession of Baron D'Ailly, who in vol. ii, pp. 131-2, and plate LV, no. 5, of his work *Recherches sur la Monnaie Romaine*, &c. gives a description and illustration of the piece. At the death of Baron D'Ailly it passed into the French National Collection in the Bibliothèque Nationale. An illustration and description of the same coin appears in Babelon, vol. i, p. 62, and also in Garrucci, p. 678 and plate LXXX. Grueber in vol. i, p. 47, of his *Coins of the Roman Republic in the British Museum* gives a print and description of the same example.

Previous to the completion of the above work, another specimen came to light from an old Italian Collection (the Bignami) and was acquired by the British Museum. A description of this coin appears in the supplement at the end of the second volume of the B.M. Catalogue and an illustration on plate CXXIII.

This example is unpatinated, and has been somewhat unmercifully cleaned. It bears the monogram K and the symbol ear of corn; in other respects it is similar to the coin already described. Grueber attributed the piece to Capua, but it would appear that Catana is more probably correct.

Grueber also says that "of this rare denomination only three specimens are known", viz. the two examples referred to above, and another which came from a recent find at

Ostia consisting of some 600 bronze coins of contemporary and later dates (*Riv. Ital.*, 1909, pp. 11 ff.).

Apparently the next piece of this issue to come to light was that in the Ratto Sale, January 1924, under lot 141, a coin without monogram or symbol. The compiler of the Catalogue described this coin as being one of four examples included in the Ostia find.

In the Hamburger Sale (no. 96), 6 October 1932, two additional specimens were offered under lots 272-3. No details were given in the Sale Catalogue as to the provenance of these two coins, but I am informed that it was generally accepted that they had formed part of the Ostia find.

The writer had the opportunity of inspecting these two coins, and after a most careful examination failed to detect that the overstriking was other than antique. Lot no. 272, the finer of the two, was, according to information received from a reliable source, purchased by the Berlin Museum; lot 273 was secured by the writer.

Since Grueber's *Catalogue* was printed a further specimen has been acquired by the British Museum. This coin, apparently from the same dies as the two coins in the Hamburger Sale, is coated with a patina beyond suspicion. That being the case it may be taken as conclusive evidence that this rare denomination actually existed in the past, and incidentally that the doubts, expressed in certain quarters, as to whether the alleged find at Ostia had any foundation in fact, are probably not justifiable.

H. P. H.

VII.

THE TERLING TREASURE

[SEE PLATES XIV-XVI.]

IN the *Archaeological Journal* for 1846 (p. 162) it is recorded that Mr. James Talbot "communicated by permission of Lord Rayleigh" two gold rings found twenty-two years previously close to Terling Place, Chelmsford, Essex, with a hoard of late Roman gold and silver coins and pottery vessels. Drawings of the rings are reproduced there and the coins are quite well listed—by emperors only—but the account can now be supplemented in many ways.

The writer is greatly indebted to the present Lord Rayleigh, who through the kind offices of Mr. Leonard Woolley and Sir George Hill, suggested a full publication of this treasure, which remains practically intact at Terling Place, and who has given every possible encouragement and facility for its proper investigation. Moreover he has placed at the writer's disposal all the available contemporary manuscripts regarding the circumstances of the discovery and the results of his own investigations concerning its site. These enable a connected narrative to be evolved.

THE FINDING OF THE HOARD.

This is best given in three letters of Robert Ellis, the Steward of the Estate, to his master, Colonel Strutt, who was away from home at the time. The illiteracy of these should, perhaps, not be judged by modern standards.

Italics are used where owing to bad handwriting and spelling the reading is uncertain :

I.

Hon^d Sir,

Yesterday morning as the thin tall Wood, was driving the Earth from the new road to the new garden in the new road near the jumping barrs, when the Rutts was cut in deep he perceived the wheel to cut out a Jar or small Earthing pot and something like buttons in it—on examining it proved to be pieces of Silver which was carried round on the wheel and got into the dirt again—of which I have got 233 pieces and a piece of the bottom of the jar, it is read Earthing ware and in fair state and I guess might have held three quarters of a pint wether it was full or not I cannot tell I do suppose the wheels of the cart had been chaffin the Jar or pot for some time before it turned it up.

The [*lacuna sc. silver*] is supposed to be 1500 year old—and no doubt it was in the Jar untill the wheel, disturbed it—being all in a perfect state and only wanted a little washing—I have sent 15 of them to Gen^l Strutt and Mr John Goodday has got of it 16 pieces to see what he can make of them.

I was with the men just as they hand found them and they brought them to me.

By Wood Jos	169	}	233
Payne	16		
Raven W ^m	20		
Do. W ^m Jun ^r	20		
Midleton Boy [?]	8		

Understanding some few more since have been found which have been carried about by wheel of the carts and picked up on the cow pastures and in the cart rutts and of the wheels of the carts.

The pot was in the Bank which cross^s the new road down for the cow-house.

Perfect the charcoal-Man will be up to-Morrow or Tuesday morning and if I can see him will send by him a few of them.

Your duty full Servant
[Sgd.] Robert Ellis

21 March 1824

II.

Hon^d Sir.

Since I came here my Son has come to inform me off another pot or Jar being found having in it two large gold rings and thirty piece of gold—upwards of thirty piece of more Silver. The pot is small and nearly perfect and more pots aparently perfect but when tuched fell to *mold* and nothing in them. My son has *discerned* they will be *ancient* and I will set a gard this night and try on to Morrow. The gold is the same [*word quite illegible*] as the Silver and the size of a Guinea and as perfect as if come this moment from the Mint.

Witham
23 March 1824

Your duty full Serv^t
[Sgd] Robert Ellis

[Postscripts to foregoing :—]

I am sorry the Men did not give all they found up to me. for I find now they sold some few of them as low as three for sixpence on Saturday.

I sent 20 pieces of Silver by the man with the charcoal.

The rings are are as perfect and Nice as if they came out this Minute out of a trinket Box.

[Letter addressed to Col. Strutt M.P. 36 Green St. Grosvenor Sq. London.]

III.

Terling 24th March 1824
4 o'clock afternoon

Hon^d Sir

I hope you have had my dated 23rd instant nothing of any note has been found this day—some part of the Earth appears as if it had been wood perished from time laying in the Earth—I took all came to hand yesterday afternoon over early this morning to Gen^l Strutt's and left them with him. for they come from all parts to see and now they will come more.

Your duty full Serv^t
[Sgd] Robert Ellis.

The only other document which needs mention is a letter from Witham signed "Z" which appeared in the *Kent and Essex Mercury* of 30 March, 1824. This account claims to be "derived from personal observations and enquiry on the spot". It confirms Ellis's narrative (if confirmation is necessary), and mentions that the find was made in "soft soil, where a bank has been levelled within a few years". The anonymous writer adds that "probably as many as 100 or 150 [of the first day's find] were given away or sold for a penny or twopence each in the course of the day", but that "the golden discovery of Tuesday seems to have been completely secured by Mr Ellis for Colonel Strutt". A pencil note made here in another hand reads "i.e. 71 silver 30 gold".

Briefly, then, it can be said that on 20 March the cart smashed a fairly large pot containing probably between 300 and 400 silver coins. Robert Ellis secured 233 of these, the number given in the manuscript lists in the handwriting of Miss Strutt, afterwards Mrs. Drummond, now preserved at Terling Place.¹ The pottery fragments were not preserved and the other coins were irretrievably dispersed. On 23 March special search was made, resulting in the discovery of more silver coins and a small vessel containing the gold treasure. The pot is small and could not have contained all the 71 siliquae as well as the gold. Ellis states that about 30 of them were in the pot; the others must be part of the contents of the larger pot found on 20 March, which were not recovered until the 23rd. It is clear that the two vessels were

¹ This number is given, also, in the *Sun* of 22 March, 1824.

close together and formed a single hoard. Several such instances of the burial of gold and silver of this period together can be cited: Reading, Berkshire (*V.C.H.* i. 212); Sturmer, Essex (*Arch.* xiv. 71 f.); Allington, Hampshire (*V.C.H.* i. 343); Bentley, Great Stanmore, Middlesex (Gough's *Camden*, ii. 30); Guisborough, Yorkshire (Elgee, *Romans in Cleveland*, 14); only, however, in the Great Stanmore find is more than one solidus recorded with siliquae. The greater number of recorded hoards of this date are of gold or of silver alone.

THE SITE.

Lord Rayleigh was able in 1913 to discuss the finding of the treasure with a gardener, Henry Girton, who 35 years previously had had the site pointed out to him by one of the finders mentioned in Ellis's first letter (p. 146), William Raven Junr. As a result he has been enabled to fix the site within a few yards and has very kindly prepared the map (Fig. 1) on which the spot is marked.

The new road, which was being made in 1824, is almost certainly the present drive from the top of the cutting to the "Lodge" where the butler resides. About 30 yards outside the gate on this road and about 10 yards on the right hand side stood three elms (since removed). The site is either between the road and these trees or less likely a few yards further to the right. The bank, which was levelled, was probably a hedgerow marked on the very fine map (dated 1597) of the "Mannor of Tarling" preserved at Terling Place, and if these three elms were hedgerow trees they may actually have been on the site of the find.

There is now nothing in the vicinity to suggest any structure or foundations. Ellis does, however, mention in the letter of 24 March a discoloration of the soil

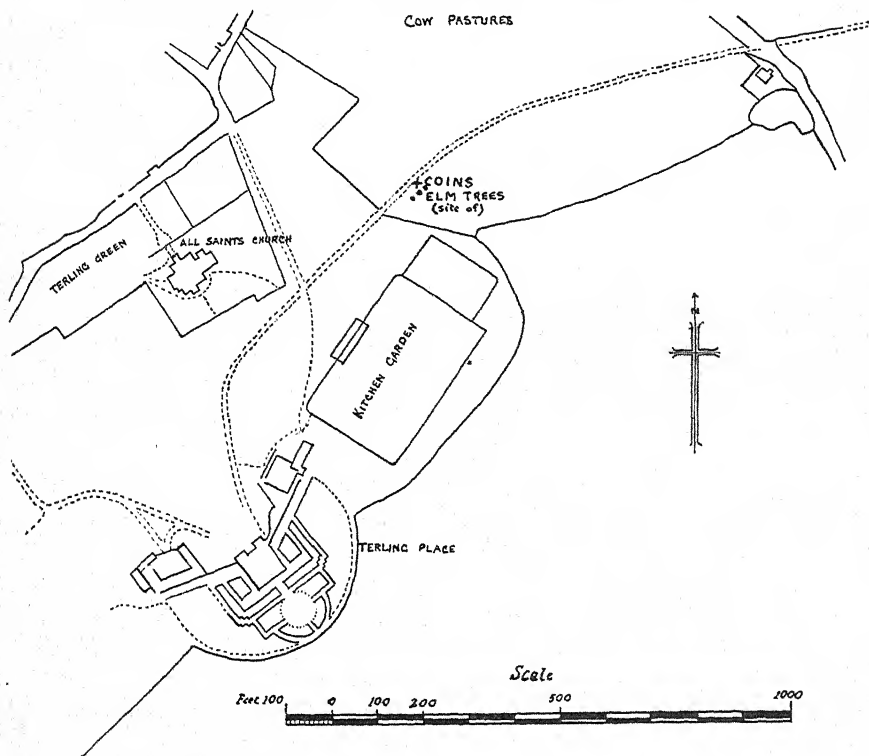


FIG 1. Map showing site of find (based on the O.S. map with the sanction of the Controller of H.M. Stationery Office).

as of burnt or decayed wood. Moreover the two bronze coins, included in the collection at Terling, and according to the manuscript list there definitely "found at the same time and place", are quite out of keeping with the other coins.² They are typical of many

² One of these is an Urbs Roma type of Constantine I, m.m. TRP, the other is probably a radiate head of third-century type. Both are very worn and of small 3Æ size.

Romano-British sites occupied during the Constantinian period and may indicate the existence of such a site in the near neighbourhood. If this should be

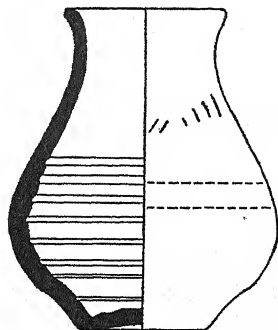


FIG. 2. Pottery Vessel. ($\frac{1}{2}$)
(Dotted lines on elevation
indicate position of graffito,
fig. 3.)

the case the disposal of the hoard near a dwelling or in its ruins would fall into line with such occurrences recorded elsewhere. Cf. Mitcheldever, Hampshire (*Arch. J.* iii. 160); Nobottle, Northamptonshire (*Num. Chron.* 1930, 275 ff.); and Corbridge (*Num. Chron.*, 1912, 275 ff., *Arch. Ael.* 3rd S., v. 351 ff.).

THE POTTERY VESSEL.

This is now by no means perfect; about two-thirds remains, in a cracked condition, including a very small portion of the rim, which is just sufficient to give an accurate section (Fig. 2).

It stands $3\frac{1}{4}$ ins. high and is of brick-red ware, very hard and fine grained. The outer surface, which is covered with a paler red-brown slip, is hard and has a typical "Romano-British feel". In a few places on the bulge there are traces of a slight burnish. As the

drawing shows, the interior surface is grooved, almost corrugated: the outer surface, however, although smooth is slightly uneven. Below the lip there is



FIG. 3. Graffito on pot. ($\frac{1}{2}$)

ornament of incised diagonal lines. This is only partly preserved but may have been intended as a conventional leaf design.

No exact parallel for the shape of this vessel has been found. A Flavian jar from Caerleon (Prysg Field) is similar in many respects (*Arch. Camb.* 1932, p. 315, no. 299), and Dr. R. E. M. Wheeler has very kindly shown to the writer other examples of this type (but with definite rim) from an Antonine deposit at Verulamium (1932).³ All these other vessels have pronounced foot-rings.

It is probable that the present example shows the later development of this early type and there seems no reason to date it much if at all prior to the period of the coins, which it contained, c. 410 A.D.

On the upper part of the bulge of the vessel in the position indicated on the elevation by dotted lines is a roughly incised graffito (Fig. 3). The reading is certain—INTVX [for INTVS = within] VIII, presumably indicating the original contents of the vessel, but Mr. R. G. Collingwood has been unable to quote a parallel or suggest a suitable measure in this instance.

³ Report forthcoming. Thanks are due also to Dr. R. E. M. Wheeler for help in the elucidation of this graffito.

THE GOLD RINGS.⁴

The smaller of the two rings (A, Fig. 4) measures internally 1.3 cm. from side to side and 1.2 cm. from bezel to base. The ring itself is formed of a thin strip



FIG. 4. Ring A. ($\frac{1}{2}$)

of gold, c. 6 mm. thick, with a pronounced medial ridge bordered on each side by a single twisted gold wire giving ordinarily an overall width of 3.5 mm. At the shoulders this strip widens and the wires curve outwards and continue beneath the fluted border of the bezel. The spaces thus formed are filled with two double spirals in wire and a pair of smaller spirals linked by a wire, which conforms to the space available for decoration.

The bezel, which is oval, measuring 1.5 cm. \times 1.3 cm., has a gold setting with an obliquely fluted border. It is made of a paste formed of two layers: the lower of a very dark brown colour and an upper thinner layer of dull blue. The engraving on this may be, as the writer in the *Archaeological Journal* (*loc. cit.*) suggests, an ear of corn, but it is probable that it has been somewhat mutilated since that date. The surface is now worn and indistinct.

It is, fortunately, possible to quote an exact parallel for this ring in the ring found with fifty solidi of the Theodosian period and an ingot of silver (stamped

⁴ The writer is indebted for the drawings of the rings and graffito to Mr. L. Monro.

HONOR in a triangular space) at Bentley Priory, Great Stanmore, Middlesex. This is recorded in Gough's *Camden* (ii. 30) and the ring illustrated (i. lxxii). The



FIG. 5. Ring B. ($\frac{1}{2}$)

present whereabouts of this hoard is unknown. There are, also, five very similar rings now in the British Museum. Two were found "near the entrance of the caves at New Grange",⁵ Ireland, with other gold ornaments, and presumably like the Coleraine hoard of siliquae⁶ represent loot from a raiding expedition. At New Grange a denarius of Geta was found "near the same spot", but in the *B.M. Catalogue of Finger Rings* (Greek, Etruscan, and Roman, 869, 870, Pl. XXII) in common with the rest of this type they are dated to the fourth-fifth century. The other three are no. 571 (Pl. XVI) from Havering atte Bower, Essex, no. 653 (Pl. XVII—Franks Bequest), and no. 868 (Fig. 117—Franks Bequest) from Rome which appears to be almost as good a parallel to the present example as the Great Stanmore ring.

The larger ring B (Fig. 5) measures internally 2 cm. from side to side and 1.6 cm. from top to base. The ring itself is formed of a flat strip of gold of equal width throughout (4.5 mm.) bordered on each side by

⁵ *Arch.* xxx, Pl. XII, p. 137. This reference and that to Gough's illustration are given in *Arch. Journ.*, loc. cit.

⁶ *Num. Chron.*, 1855, 101 ff.

a beaded wire. These wires upon reaching the collar of the bezel are bent back and end in an S-bend. The space between them on the ring is entirely occupied by a triple guilloche pattern composed of three sets of three strands of gold wire.

The gold setting of the bezel is oval, measuring 1.7 cm. \times 1.3 cm., and has an obliquely fluted border. The bezel itself, which in 1846 (*Arch. J.*, *loc. cit.*) was formed by a "colourless crackly crystal or paste, uncut, and en cabouchon", no longer exists.

A parallel has not been found for the guilloche pattern on a finger ring, although *B.M.C.*, *op. cit.*, Pl. XV. 515, seems somewhat similar. It does, however, form part of the ornament on two gold bracelets—one from Rhaiadr, Radnorshire (*B.M.C. Jewelry* 2798/9, Pl. LXIV), which is dated there to the second-third century by the associated ring (*B.M.C. Rings* 497),⁷ and the other (*B.M.C.* 2823, Pl. LXVI), from the Castellani Collection, similarly dated. In the former instance the guilloche is of a more open type; in both cases the design is carried out in triple strands of gold wire.

The guilloche occurs, also, engraved as a border on one of the silver vessels of the fifth century Coleraine hoard, now in the British Museum. It is, of course, also frequently found on mosaics of the Roman period, including the example from Hemsworth, Hampshire, in the British Museum.⁸ As a design it was indeed common in antiquity; it is only necessary to mention

⁷ See also *Arch. Camb.*, 1899, 259, *R.C.H.M.* 530, and Wheeler, *Prehistoric and Roman Wales*, pp. 215-16.

⁸ No. 33, p. 99, in the new *Catalogue of Mosaics*, 1933. For help with this ring the writer is grateful to Messrs. F. N. Pryce and Roger Hinks of the British Museum.

a ring of the Mycenaean period from excavations at Enkomi, Cyprus (*B.M.C. Rings*, 680, Fig. 98).

There seems no reason for placing the Terling specimen much, if at all, earlier than the date of the rest of the treasure—the early fifth century A.D.

A study of jewellery found outside the Roman world in such districts as Gothland and Hanover, which is attributed to the period of the Roman Empire (prior to its disruption), suggests certain parallels both in technique and in ornament which may assist in a correct interpretation of the present examples.

Dr. Nils Åberg in *Förhistorisk Nordisk Ornamantik*⁹ (pp. 64 ff.) discusses very similar decoration. Figs. 129–132 show varieties of interlaced work in narrow threads or stamped in imitation thereof, and Fig. 135, although lacking the spirals, is otherwise a close parallel for Ring A. It has a wire loop and a number of pellets arranged in a somewhat haphazard manner. The interlaced work is considered to be, probably, the result of Roman influence, which appears sporadically as a chance form, but was not firmly established in northern lands until a much later period. The filigree ornament, however (Figs. 133 fibula, 134 trinket, 135 bead), formed of twisted wire and pellets may, possibly, be derived partly from earlier native tradition and partly from Marcomannian Bohemia.¹⁰

⁹ Uppsala, 1924. The writer wishes to thank Mr. C. A. Raleigh Radford for this reference, and Mr. E. W. Lovegrove for a translation of the chapter.

¹⁰ Compare, also, the fourth-century gilded silver fibulae from Sackrau, near Breslau (*The Arts in Early England*, iii, Pl. XXXVIII, 3–5, and p. 310), and the Gothic mounted medallion from Szilagy Somlyo, near Grosswardein, Hungary (*op. cit.*, iv, Pl. G, III, and p. 529, and iii, p. 324).

The similarity in technique between these northern ornaments and the Terling rings (and their native parallels) is marked, and it is possible that the latter are the products of influences from lands outside the Roman Empire. On the other hand the fact that some elements of the former are looked upon as foreign and probably due to Roman ideas and the existence in these islands of a number of parallels for Ring A lead rather to the conclusion that they are the independent products of the fusion in this country of Roman and native ideas.

THE COINS.

The coins now at Terling Place comprise 26 solidi, 296 siliquae, and the two small 3 Æ already mentioned (p. 150). According to all the available contemporary documents those preserved there originally numbered 30 solidi and 304 siliquae, with the two bronze coins, although it is unlikely that more than 28 solidi were ever actually in the cabinet. Consequently it appears that a few of the coins, possibly duplicates, have disappeared since 1824. These probably included one solidus each of Valentinian II and Honorius, and two of Arcadius, also siliquae of Julian, Valens (? 2), Magnus Maximus (? 3), Eugenius and Arcadius.

As Ellis's letters imply, all the coins are in good condition. A certain number of the earlier issues are somewhat worn, but in no case is this sufficient to make them illegible. Only two coins have mint marks entirely cut off and very few have any letters of the legends removed in that way. Indeed, clipped coins are rare in the hoard, and there is no example of those

very closely cut siliquae which figure so largely in many hoards of this period (v. the few coins from the Coleraine and Guisborough hoards now in the British Museum, Roman Britain Room).

The coins are as follows:—

[Unless otherwise stated, all have the normal obverse type—bust diademed (double row of pearls), draped, and cuirassed right.

The weight, in grammes, of each coin is given at the end of each reverse type.¹¹ The weights follow precisely the order of the mint-marks, a comma being placed between every coin, a semicolon at the conclusion of a mint-mark. cl. after a weight, sometimes with qualifying adverb, = clipped.

References to Pearce are to *The Coinage of the Valentinian and Theodosian Periods*, by J. W. E. Pearce, in Spink's *Numismatic Circular*, January, 1931 ff.]

SOLIDI.

Valens.

1. *Obv.* D N VALENS | P F AVG Rosette diadem.
Rev. VICTOR | IA AVGGG Two emperors seated,
together holding globe; Victory behind, palm
below.
Mint. TR·OB· (Trier) [Pl. XIV. 1]. (4·47.)

Gratian.

2. *Obv.* D N GRATIA | NVS P F AVG
Rev. As 1. Emperors equal; not nimbate; l. leg
bare.
Mint. TROBT (Trier) [Pl. XIV. 2]. (4·48.)

¹¹ The arduous task of obtaining this information was nobly undertaken by Mr. H. Mattingly and Mr. J. W. E. Pearce, with a balance kindly lent by Lord Rayleigh.

Valentinian II.

3-7. *Obv.* D N VALENTINI | ANVS P F AVG

Rev. As 1. Emperors equal; nimbate; both legs draped.

Mint. $\frac{L | D}{COM}$ (Lugdunum) [Pl. XIV. 3]; $\frac{M | D}{COM}$
(Mediolanum) [Pl. XIV. 4]; $\frac{T | R}{COM}$ (3) (Trier)
[Pl. XIV. 5, 6]. (4.45; 4.50; 4.49, 4.47,
4.48.)

Arcadius.

8-13. *Obv.* D N ARCADI | VS P F AVG

Rev. VICTOR | IA AVGGG Emperor standing r.
with standard and Victory on globe; foot on
captive.

Mint. $\frac{M | D}{COMOB}$ (5) (Mediolanum) [Pl. XIV. 7-9];
 $\frac{R | M}{COMOB}$ (Rome) [Pl. XIV. 10]. (4.44,
4.48, 4.48, 4.50, 4.48; 4.46.)

14. As foregoing, but VICTOR | IA AVGGH

Mint. $\frac{S | M}{COMOB}$ (Sirmium) [Pl. XIV. 11]. (4.41.)
A variant of Pearce 7.

Honorius.

15-26. *Obv.* D N HONORI | VS P F AVG

Rev. As 8-13.

Mint. $\frac{M | D}{COMOB}$ (11) (Mediolanum) [Pl. XIV. 12-14;
Pl. XV. 15-16]; $\frac{R | M}{COMOB}$ (Rome). (4.46,
4.47, 4.49, 4.48, 4.46, 4.39, 4.46, 4.47, 4.38,
4.45, 4.37; 4.42.)

SILICUAE.

*Constantius II.*27-36. *Obv.* D N CONSTAN | TIVS P F AVG*Rev.* VOTIS XXX MVLTIS XXXX in wreath.*Mint.* PCON (3) [Pl. XV. 17], SCON (4), ?SCON (Arles); LVG (2) (Lugdunum). One SCON may have dot thus XXX (1.87, 2.02, 1.96; 1.87, 1.76, 1.81, 2.13; 1.83; 1.94, 1.78.)*Julian.*37. *Obv.* D N IVLIANV | S NOB CAES Bust bare, draped and cuirassed r.*Rev.* VOTIS V MVLTIS X in wreath.*Mint.* TCON (Arles) [Pl. XV. 18]. (1.79.)38-40. *Obv.* D N IVLIAN | VS P F AVG*Rev.* As 37.*Mint.* PCON, SCON [Pl. XV. 19], TCON (Arles). (2.02; 1.90; 1.96.)41-5. *Obv.* FL CL IVLIA | NVS P P AVG*Rev.* As 37.*Mint.* SLVG, SLVG, LVG (2) (Lugdunum) [Pl. XV. 20] + 1 (cut off) [Pl. XV. 21]. (1.66; 2.20; 1.71, 2.40; 1.29.)46. *Obv.* As 41-5, but double head (? double-struck) [Pl. XV. 22]. See p. 168.*Rev.* As 37.*Mint.* LVG (Lugdunum). (1.60.)47-50. *Obv.* As 41-5.*Rev.* VOT X MVLT XX in wreath.*Mint.* PLVG, SLVG (2) [Pl. XV. 23], LVG (Lugdunum). (2.15; 1.85, 1.88; 1.79.)

51-9. *Obv.* D N FL CL IVLI | ANVS P F AVG

Rev. As 47-50.

Mint. $\overline{\text{PCONST}}$ (2), $\overline{\text{SCONST}}$ (3) [Pl. XV. 24],
 $\overline{\text{TCONST}}$ (2), $\overline{\text{CONST}}$ (Arles) bearded
 head, $\overline{\text{SLVG}}$ (Lugdunum) clean-shaven.
 (1.81, 1.76; 1.83, 1.96, 1.77; 1.90, 1.68;
 1.93; 2.08.)

Jovian.

60. *Obv.* D N IOVIAN | VS P F AVG

Rev. VOT V • MVLT X in wreath.

Mint. $\overline{\text{PCONST}}$ (Arles). (1.67.)

[The reverse types VIRTVS ROMANORVM and VRBS ROMA are numbered as follows:—

- I. Rome seated on throne or chair, holding Victory on globe and sceptre (less commonly spear). Virtus type has spear instead of sceptre and no Victory.
- II. Rome seated on cuirass, holding Victory on globe and reversed spear, rarely a sceptre.]

Valentinian I.

Obv. (In all cases) D N VALENTINI | ANVS
 P F AVG

61. *Rev.* VOT V MVLT X in wreath.

Mint. $\overline{\text{RT}}$ (Rome). (2.03.)

62-3. *Rev.* VOT V MV • LT X in wreath.

Mint. $\overline{\text{RT}}$ (2) (Rome). (1.94, 1.97.)

64-5. *Rev.* VRBS ROMA Type I.

Mint. $\overline{\text{RQ}}$ (Rome) [Pl. XV. 25], $\overline{\text{TRPS}}$ (Trier).
 (1.66; 1.79.)

Valens.

Obv. (Except no. 68) D N VALEN | S P F AVG

66. *Rev.* RESTITV | TOR REIP Emperor standing
1. with labarum and Victory on globe. On
shaft of labarum a hook.

Mint. SLVG• (Lugdunum). (1-61.) A variant of
Pearce 25.

67. *Rev.* VOT V MV•LT X in wreath.

Mint. RB (Rome). (1-88.)

68. *Obv.* D N VALENS | P F AVG

Rev. VOT X MVLTT XX in wreath.

Mint. ANT•• (Antioch). (1-95.)

- 69-102. *Rev.* VRBS ROMA Type I.

Mint. RQ (3) (Rome), TRPS (2) [Pl. XV. 26, 27],
TRPS• (26) [Pl. XV. 28-29], TRPS (2)
[Pl. XV. 30] (Trier); with reversed spear,
not sceptre TRPS• (Trier). (1-85, 1-97,
1-75; 2-16, 1-93; 1-94, 2-09, 1-77, 2-01,
2-22, 2-20, 2-37, 2-04, 1-96, 1-92, 1-84, 1-99,
2-03, 2-16, 2-33, 2-17, 2-15, 2-26, 1-97, 1-79,
1-77, 2-09, 1-99, 2-22, 1-77, 1-78; 1-27, 2-29;
1-91.)

- 103-6. *Rev.* VRBS ROMA Type II.

Mint. TRPS• (4) (Trier). (1-88, 1-84, 1-70, 1-63.)

Gratian.

Obv. (In all cases) D N GRATIA | NVS P F
AVG

- 107-17. *Rev.* VIRTVS ROMANORVM Type I.

Mint. AQPS (Aquileia), TRPS (10) (Trier) (one?
sceptre in place of reversed spear and A/ of
obverse ligated). (2-09; 1-88, 2-07, 2-10,
1-47 cl., 1-65, 2-10, 1-74, 1-68, 1-96, 2-08.)

118. *Rev.* VOT XV MVLT XX in wreath.

Mint. $\overline{\text{SISCP}\Sigma}$ (Siscia). (1.49.)

119. *Rev.* VOT XV MVLT XXX in wreath.

Mint. $\overline{\text{T}\Sigma\text{E}}$ (Thessalonica) [Pl. XVI. 31]. (2.10.)

120-37. *Rev.* VRBS ROMA Type I.

Mint. $\overline{\text{TRPS}\cdot}$ (14), one with A/ of obverse ligated [Pl. XVI. 32-34], $\overline{\text{TRPS}}$, $\overline{\text{TRPS}} (\cdot \cdot)$ (Trier); $\overline{\text{R}\cdot\text{T}}$ (Rome) (spear wholly visible) + 1 (cut off, but Trier). (1.78, 1.76, 1.99, 1.76, 1.72, 1.94, 2.27, 1.94, 2.04, 2.00, 1.91, 1.43, 1.85, 1.87; 2.07; 1.55 badly cl.; 1.61; 1.59.)

138-45. *Rev.* VRBS ROMA Type II.

Mint. $\overline{\text{TRPS}}$ (3), $\overline{\text{TRPS}\cdot}$ (5) (Trier) [Pl. XVI. 35]. (1.39, 1.72, 1.78; 1.80, 1.92, 1.78, 2.03, 1.99.)

Magnus Maximus.

Obv. (In all cases except no. 179) D N MAG
MAX | IMVS P F AVG

146. *Rev.* CONCOR | DIA AVGGG Constantinople seated facing, head r., with sceptre and cornucopiae; foot on prow.

Mint. $\overline{\text{TRPS}}$ (Trier) [Pl. XVI. 36]. (1.84.)

147-75. *Rev.* VIRTVS ROMANORVM Type I. Spear partly seen.

Mint. $\overline{\text{TRPS}}$ (29) (Trier) [Pl. XVI. 37] including 5 with A/ ligated on obverse and 1 with very small head. (1.44 cl., 1.97, 1.89, 1.89, 1.52, 2.02, 2.05, 1.80, 1.77, 1.59, 1.76, 1.70, 2.05, 1.66, 2.00, 2.09, 1.60, 1.65, 1.99, 1.65, 1.88, 1.62, 1.76, 2.12, 1.91, 1.42 cl., 1.69, 2.24, 1.82.)

176-8. *Rev.* Spear wholly seen.

Mint. $\overline{\text{TRPS}}$ (3) (Trier). (2.11, 1.32 slightly cl., 2.12.)

179. *Obv.* D N MAG MA | XIMVS P F AVG

Rev. VIRTVS ROMANORVM Type I. Spear wholly seen.

Mint. $\overline{\text{MDPS}}$ (Mediolanum). (1.48.)

Victor.

180-4. *Obv.* D N FL VIC | TOR P F AVG

Rev. VIRTVS ROMANORVM Type I.

Mint. $\overline{\text{MDPS}}$ (3) (Mediolanum) [Pl. XVI. 38] spear wholly seen; $\overline{\text{TRPS}}$ (2) (Trier) Spear partly seen. (1.53, 1.22, 1.52; 1.72, 1.37.)

Eugenius.

Obv. (In all cases) D N EVGENI | VS P F AVG

185-95. *Rev.* VIRTVS ROMANORVM Type II.

Mint. $\overline{\text{MDPS}}$ (3) (Mediolanum) [Pl. XVI. 39];
 $\overline{\text{TRPS}}$ (8) (Trier) [Pl. XVI. 40]. (1.42, 1.60, 0.83; 1.87, 1.97, 1.40, 1.38, 1.60, 1.48, 1.68, 1.57.)

196-200. *Rev.* VRBS ROMA Type II.

Mint. $\overline{\text{LVGPS}}$ (5) (Lugdunum) [Pl. XVI. 41]. (1.90, 2.05, 2.06, 2.58, 2.42.)

Valentinian II.

201. *Obv.* D N VALENTINIANVS IVN P F AVG

Rev. VICTOR | IA AVGGG Victory moving l. with wreath and branch.

Mint. $\overline{\text{TRPS}}$ (Trier). (1.78.)

202. *Obv.* As 201.
Rev. VIRTVS ROMANORVM Type I. Spear wholly seen.
Mint. AQPS (Aquileia). (1.59.) A new variety (see p. 169).
203. *Obv.* D N VALENTINI | ANVS P F AVG
Rev. As 202.
Mint. AQPS (Aquileia). (2.15.)
- 204-10. *Obv.* As 203.
Rev. VIRTVS ROMANORVM Type II.
Mint. TRPS (7) (Trier). (2.00, 2.12, 1.65 ? cl., 1.80, 1.74, 1.95, 1.93 slightly cl.)
211. *Obv.* As 203.
Rev. VOT X MVLT XX in wreath.
Mint. MDPS (Mediolanum). (1.43.)
212. *Obv.* D N VALENTINIANVS P F AVG
Rev. VRBS ROMA Type I.
Mint. R*€ (Rome). (2.00.)
- 213-14. *Obv.* As 201.
Rev. VRBS ROMA Type II.
Mint. TRPS (2) (Trier). From same dies obverse and reverse. (2.10, 2.15.) Only two other specimens of this coin are known.
- 215-20. *Obv.* As 203.
Rev. As foregoing.
Mint. LVGPS (4) (one ? a sceptre not a reversed spear), LVGP (Lugdunum)+1 (cut off). (2.00, 2.38, 1.75, 2.10 ; 1.83 ; 1.98.)
221. *Obv.* D N VALENTINIA | NVS IVN P F AVG (break very small and head very small).

Rev. VRBS ROMA Type II.

Mint. $\frac{|*}{AQPS}$ (Aquileia). (184.)

Theodosius I.

Obv. (In all cases) D N THEODO | SIVS P F
AVG

222-6. *Rev.* CONCOR | DIA AVGGG Type as 146.

Mint. \overline{AQPS} (Aquileia) [Pl. XVI. 42]; \overline{TRPS} (4)
(Trier) [Pl. XVI. 43]. (194; 192, 225,
186, 160.)

227-30. *Rev.* VIRTVS ROMANORVM Type I.

Mint. \overline{TRPS} (4) (Trier)—3 spear partly seen, 1
wholly. (221, 194, 181, 147.)

231-46. *Rev.* VIRTVS ROMANORVM Type II.

Mint. \overline{MDPS} (Mediolanum); \overline{TRPS} (15) (Trier).
(159 (small piece cut out); 241, 237, 208,
202, 196, 195, 182, 182, 181, 177, 176,
169, 162 cl., 160 cl. slightly, 149.)

247. *Rev.* VOT V MVLX in wreath.

Mint. $\frac{\cdot}{SISCPX}$ (Siscia). (177.)

248. *Rev.* VRBS ROMA Type II.

Mint. \overline{TRPS} (Trier). (191.)

Arcadius.

Obv. (In all cases) D N ARCAD | VS P F AVG

249. *Rev.* VIRTVS ROMANORVM Type I.

Mint. \overline{MDIS} (for MDPS) (Mediolanum). (154.)
This coin is not otherwise of barbarous
appearance.

250-86. *Rev.* VIRTVS ROMANORVM Type II.

Mint. $\overline{\text{MDPS}}$ (12) (Mediolanum); $\overline{\text{TRPS}}$ (24) (Trier)
 [Pl. XVI. 44] + 1 (cut off). (1.65, 1.57,
 1.48, 1.40, 1.32, 1.31 cl., 1.27, 1.21, 1.21,
 1.15, 1.06, 0.96; 1.90, 1.84, 1.79, 1.74, 1.71,
 1.69, 1.69, 1.61, 1.60, 1.59, 1.58, 1.55, 1.53,
 1.53, 1.51, 1.47, 1.47, 1.39, 1.39, 1.35 cl.,
 1.35, 1.33, 1.15, 1.06; 1.33.)

287. *Obv.* Barbarous lettering. | VS P F AVG
 "Emaciated" head.

Rev. As 250-86. Semi-barbarous.

Mint. $\overline{\text{MDPS}}$ (Mediolanum). (0.84 much cl.)

288-9. *Rev.* VOT V MVLT X in wreath.

Mint. $\overline{\text{MDPS}}$ (2) (Mediolanum) [Pl. XVI. 45].
 (1.30, 1.27.) Small head.

290-1. *Rev.* VOT X MVLT XV in wreath.

Mint. $\overline{\text{MDPS}}$ (2) (Mediolanum) [Pl. XVI. 46].
 (1.70, 0.99.) Large head.

292. *Rev.* VRBS ROMA Type II.

Mint. $\overline{\text{TRPS}}$ (Trier). (1.90.)

Honorius.

Obv. (In all cases) D N HONORI | VS P F
 AVG

293-319. *Rev.* VIRTVS ROMANORVM Type II.

Mint. $\overline{\text{MDPS}}$ (27) (Mediolanum) [Pl. XVI. 47-48]
 —1? sceptre not spear. (1.79, 1.60, 1.55,
 1.53, 1.45, 1.44, 1.44, 1.43, 1.39, 1.37, 1.37,
 1.36, 1.33, 1.29, 1.28, 1.25, 1.24, 1.19, 1.19,
 1.19, 1.15, 1.15, 1.14, 1.12, 1.06, 0.99,
 0.99.)

320-1. *Rev.* VOT V MVLT X in wreath.

Mint. $\overline{\text{MDPS}}$ (2) (Mediolanum) [Pl. XVI. 49].
(1.46, 1.19.)

322. *Rev.* VRBS ROMA Type II.

Mint. $\overline{\text{TRPS}}$ (Trier) [Pl. XVI. 50]. (1.19.) Reverse is normal, obverse head somewhat barbarous, but lettering legible. For discussion see p. 169.

The note which follows this paper deals sufficiently with the broader aspects of the importance of this hoard, viz. its date and its relation to other similar hoards, and the present writer is much indebted to Mr. Pearce for this contribution.

In detail Mr. Pearce states that the Terling coins support the conclusions which he recently published (*Num. Chron.*, 1932, pp. 245 ff.) regarding the *Urbs Roma* and *Vota* issues of Treviri mint, providing indeed many additional links in the chain of evidence. These will not be touched upon here, but will be embodied in future work on the subject.

It remains, therefore, to indicate those varieties which do not appear to have been recorded hitherto.

No. 14 [Pl. XIV. 11] has not been noted with H at the end of the reverse legend.

No. 46 [Pl. XV. 22] is most peculiar. Apart from a slight blurring of the first few letters on the right of the obverse (NVS P P) the coin is normal; yet the front of the face is clearly double-struck. It can only be supposed that the first striking was light, only the head and a few letters being struck, and that the second striking, which this error necessitated, was not absolutely true.

No. 66 with mint-mark SLVG• has not been noticed before.

No. 202 (unbroken legend) is not quoted by Mr. Pearce in his list. It is not infrequently difficult to decide in coins of this issue whether or not there is a break in the obverse legend. In the present example the gap between the A and N is perhaps slightly wider than the normal gap between letters and thus it *might* be said that the legend is broken. On the other hand the corresponding *Urbs Roma* issue (same obverse) always has a very distinct break and it seems preferable to mark the legend of the Terling coin as unbroken. At this period there was little significance in the feature and the die-cutter may not have been very particular.

Attention may be drawn to No. 249, a coin otherwise normal but with mint-mark MDIS, a slip for MDPS, also to No. 287, a "semi-barbarous" coin, quite unlike the standard issues and, probably, the product of an irregular mint, and above all to No. 322 [Pl. XVI. 50], the significance of which Mr. Pearce discusses below (p. 180). The reverse is usual, but the features of the obverse portrait are quite unlike those of normal coins of Honorius. If Mr. Pearce's most likely interpretation is correct it was struck by a moneyer who had access to an old reverse die, but not an obverse, and did his best to make good the deficiency by copying an older coin. In this sense it may well be a lineal ancestor of a long line of entirely barbarous imitations, such as the coin mentioned below (*loc. cit.*). A series of this kind has yet to be found or recognized, but it is, perhaps, admissible to suggest as in some ways its culmination the issue of Saxon sceattas, some

of which closely resemble the obverse of the present coin.

This piece is valuable not only as clinching the date of the hoard, but also as an indication of the degree of skill at a legitimate mint in Gaul at the time of the official severance of Britain from the Roman Empire.

B. H. ST. J. O'NEIL.

NOTES ON THE TERLING AND OTHER SILVER HOARDS FOUND IN BRITAIN.

The publication of the Terling hoard coincides aptly with the appearance of Dr. Mickwitz's ingenious and revolutionary theories on the course of the fourth-century silver currency. Dr. Mickwitz's book is reviewed on p. 241 f. of this volume, where a summary of his main thesis is given. His theories are based largely on evidence obtained from hoards found in these islands. (Why they should all—with inconsiderable exceptions—be found here is a question to which no conclusive answer has been given. Perhaps if for "found" we substituted "recorded when found", the answer would be easier and the original question unnecessary.)

Date, weight, and extent of issue are all important factors in Dr. Mickwitz's argument. The date of the Terling hoard is undoubtedly late. To establish this we have only to compare it with other hoards which are approximately dated by coins of Constantine III. But in view of the interest aroused by Dr. Mickwitz's work it may be useful first to give a brief summary

of the salient facts which emerge from a consideration of the earlier hoards also. In this way we shall have a convenient survey of the whole field.

The other hoards¹² of which we have detailed information are—in the order of their deposition—East Harptree (1496 coins), described in *Num. Chron.* 1888; Groveley Wood (299 coins), *Num. Chron.*, 1906; North Mendip (2042 coins), *Num. Chron.*, 1915; Icklingham I (318 coins), *Num. Chron.*, 1908; Icklingham II (68 *Æ*), *Num. Chron.*, 1929; Coleraine (1506 coins), *Num. Chron.*, 1855.

Leaving out of account comparatively small issues, which, however interesting historically, would have little bearing on our present inquiry, we arrive at the following results:—

Period before Valentinian I.

Silver struck at a higher standard than 1.9 grm. is rare. The East Harptree hoard, deposited c. A.D. 377, has 1072 coins of this period, but only 8 are of the (average) 3.175 standard. The introduction of the 1.9 coins can be dated within narrow limits. Constantius II's *vot XXV mult XXX* are of the heavier standard; his *vot XXX mult XXXX* of both the heavier and, far more commonly, the lighter. There is no doubt as to the signification of these *vota* numerals. Constans died in 350, but coins are found for him with *vot XXX*

¹² Although *details* are known of only these few hoards, there are authentic records of at least thirty-five other similar discoveries of coins (Theodosian period), about two-thirds of which are of silver and/or gold. They are scattered throughout the civil zone of the Roman province of Britain, including Cornwall, and extend to the wall in Northumberland. A bibliography will be published in the *Archaeological Journal* for 1933.—B. H. Sr. J. O'N.

(C. 81, 142). The *vota* are of course of Constantius II, who at Constans' death, had completed 25 years and 2 months since his elevation as Caesar (Nov. 324). The lighter coin, therefore, was introduced between 349 and 354. The huge output of the *rot XXX mult XXXX* type must be dated to the latter part of this period when the Gallic mints, from which they mainly come, had been recovered from Magnentius. This 1.9 coin seems to have been struck steadily through Julian's years of Caesarship but not again intensively until 360, in preparation for his struggle with Constantius.

All the hoards other than East Harptree date at least as late as the reign of Eugenius (392-4). All include coins of Constantius, but of course with much diminished percentages ranging from about 5 per cent. in the Coleraine through c. 6 per cent. (Icklingham), c. 8 per cent. (Grovelly Wood), c. 12 per cent. (Terling) to c. 32 per cent. in the North Mendip hoard. This last high percentage is perhaps due to the hoarding having begun in an earlier generation.

Our accounts of the hoards give little definite evidence as to the clipping of these coins. In the Coleraine hoard the clipping seems to have been very drastic, as it was in the silver coins of a mixed (chiefly bronze) hoard from Icklingham (II) described in *Num. Chron.*, 1929, which the preponderance of Honorius in the *Salus reipublicae* type led me to date some time after 395. Out of 68 *siliquae* (I use the term without prejudice to Dr. Mickwitz's new theory) 56 were clipped, all but 5 very badly. The two coins of the Constantinian period were quite unidentifiable.

The Period 364-75.

The East Harptree hoard which ends a year or two after the death of Valentinian I, gives us very clear information as to his silver coinage. This was crowded almost entirely into the years 364-7. The largest issue was of *Restitutor reip.*, chiefly from Lugdunum, and there were large issues of *vot V mult X* and *Urbs Roma* from Rome. After Gratian's accession in 367 there was no further striking of silver on a big scale in the West, though Antioch, naturally not strongly represented in our hoards, must have put out a very large issue of *vota* coins between 369 and 374.

The Period 375-383.

As the East Harptree hoard shows that in the issues of 364-7 Valentinian I was, as we should expect him to be, as strongly represented in the coinage as his brother, the fact that only seven coins of *Urbs Roma* from Treveri occur for him in this hoard against 79 for his brother proves that the great bulk of this issue must be dated in the year or two following his death. These years, then, 376 and 377 must rank as of great importance in the history of the silver coinage. The coinage of 378 in which we must include much of the smaller but still considerable "cuirass" issue of *Urbs Roma*, was only slightly less important and it is convenient to take these three years together, as the "throne" and "cuirass" issues are not always discriminated in our records.

To judge from the consensus of all our later hoards the output of these three years still formed a dominating part of the currency to the end. Except at

Coleraine, where the evidence is not very trustworthy, it amounts to a fraction varying from a quarter to a sixth of the whole. At Coleraine it is still considerable. In the Terling hoard, the only one which I have been able to examine, it amounts to about a sixth; the coins are in some cases well over the 1.9 standard and are only slightly, if at all, clipped.

After this culminating issue the remainder of Gratian's reign is represented by a merely normal output of his *Virtus Romanorum* type.

The Period 383-8.

The reign of Maximus marks another culminating point in the issue of silver, his *Virtus Romanorum* coins being represented in our hoards by rather over half the number of Gratian's *Urbs Roma* coins. Meanwhile there is very little trace of silver from Valentinian II's mints; the inference being that Maximus had control of the mines from which the silver of the Western Empire was derived. For the contemporaneous coinage of the Eastern Empire there is naturally little evidence in our hoards.

The Period 388 onwards.

We come now to the later coinage on the evidence of which we shall have to determine the date of the Terling hoard. It will be convenient to have this evidence in tabular form:

		<i>Grov. Wood</i>	<i>N. Mend.</i>	<i>Ick. I</i>	<i>Terl.</i>	<i>Coler</i>
<i>Urbs Roma</i> (Lugdunum)	Val. II.	7	15	9	6	4
	Th.	2	7	1		
	Arc.	2		1		8
	Eug.	2	8	3	5	8
<i>Virtus Romanorum</i> (Treveri)	Val. II.	6	48	7	7	3
	Th.	20	109	24	8 with Val. II. ¹³ 7 with Eug.	23
	Arc.		12	9	24	
	Eug.	5	8	6	8	
<i>Virtus Romanorum</i> Mediolanum	Th.		8	2	1	1
	Arc.		2	17	13	39
	Eug.		7	1	3	
	Hon.		2	10	27	45
<i>V-X</i> Mediolanum	Arc.	2	9	2	2	2
	Hon.		10	1	2	8
<i>X-XV</i> Mediolanum	Arc.		7	0	2	
	Hon.					

The hoards will now be considered in order of deposition.

¹³ There are certain slight reverse *differentiae*, some of which are confined to Valentinian II's issues. These are shared by Theodosius alone. Others seem never to occur for Valentinian, but to be regularly found for Eugenius. These are shared by Theodosius, and to a still more noticeable extent (including a die-identity), by Arcadius.

GROVELEY WOOD.

Groveley Wood, it is seen, has no coins of Honorius and no *Virtus Romanorum* issue from Mediolanum. As this issue nowhere occurs for Valentinian II, it must have been struck first by Eugenius when he occupied Milan in the spring of 393. Probably at this point the Treveri mint was closed, for not only did it not strike for Honorius when Gaul reverted to Theodosius in 394, but the *Virtus Romanorum* coins of Arcadius from Treveri show in general such a complete similarity to, and actually in one instance a die-identity with, those of Eugenius, that they must have been struck together. This could have happened only in the earlier part of his reign when Eugenius still hoped for recognition from Theodosius. The Groveley Wood hoard, then, pictures for us the coinage of early 393.

Sir George Hill in his description of this hoard places it a little later than I have done on the ground that another hoard consisting of $\text{Æ } 4$ and including coins of Honorius was found with it. But though this would certainly prove a later date for its deposition, I still feel strongly that the entire absence—not of Honorius—but of any of the *Virtus Romanorum* issue from Milan (cf. North Mendip *infra*) gives some such *terminus ad quem* for the assemblage of the silver portion of the hoard as I have assumed.

Eugenius is represented in two Gallic mints only, where naturally we should expect to find his earliest issues. His issue from Treveri must certainly be dated early in his reign. It will be seen that in all the hoards Theodosius is better represented in this mint than either Valentinian II or Eugenius, and

a study of the reverse varieties shows clearly that both emperors struck for him. The total omission of Arcadius is very strange but must be a mere chance. The other hoards contain several of his coins, which must date from the early part of Eugenius' reign before the latter was in open hostility with Theodosius. At Lugdunum the *Urbs Roma* coins of Eugenius seem to be merely a continuation of those of Valentinian II. In fact the reverse varieties of Valentinian II, Theodosius, Arcadius, and Eugenius are so much alike that I cannot with certainty assign any of Theodosius' or Arcadius' coins from this mint to the reign of Eugenius.

It remains to discuss the two *vot V mult X* MDPS coins of Arcadius. The other hoards have this type for Honorius also. According to the usage of the time the *vota* may be not of Arcadius himself but of his brother, in which case the hoard would have to be dated after the defeat of Eugenius in September 394. But the strong arguments in favour of an earlier date are equally strong arguments in favour of the *vota* being Arcadius' own—as it is quite natural they should be. A consideration of the *A* *Concordia Augggθ* MDOB with the parallel *vot X mult XX* for Valentinian II and Theodosius and *vot V mult X* for Arcadius supports this conclusion and brings these coins of Arcadius into connexion with the *A* *vot X mult XX* MDPS of Valentinian II and Theodosius. The whole group was probably struck at the very beginning of Valentinian II's independent reign in 383 after the death of Gratian, to which the mysterious *θ* of the *A* legend may allusively refer.

NORTH MENDIP.

The North Mendip hoard takes us a stage farther. The Gallic mints are no longer of help in dating and we can look exclusively at Mediolanum. For the size of the hoard this mint is not strongly represented. This fact and the further fact that Theodosius has twice as many *Virtus Romanorum* coins as both his sons together point to a time when the mint had not been long in operation, and when Theodosius as the reigning emperor would naturally have most of his coins struck in his own name. The following three hoards show that after his death in 395 the mint continued in active operation for the coinage of his sons. The North Mendip hoard, therefore, can be dated to the early part of 395. The evidence of the *vota* coins of Honorius agrees with this. They would be among the earliest coins of a new emperor. Their issue does not seem to have been prolonged, in contrast to that of *Virtus Romanorum*. The *rot X mult XV MDPS* coins of Arcadius probably date back to the appropriate years 388-93 or to that portion of them when the legitimate emperors were in possession of the mint.

ICKLINGHAM I.

In the Icklingham silver hoard our evidence of date must again be taken exclusively from Mediolanum. Lugdunum and Treveri repeat the story of Groveley Wood, except in regard to Arcadius. But if the increased representation of Arcadius at Treveri in this and more especially in the Terling hoard should be thought to argue a prolonged or renewed activity of this mint, it is enough to answer that Honorius

could not have been omitted from this issue of his own mint.

At Mediolanum a definitely later stage is reached. The coins of Arcadius and Honorius now far outnumber those of their father. That this is not accidental is shown by the evidence of the two remaining hoards. How long we should allow to account for this disproportion between the coinage of father and sons may be debatable, but it must have been, I think, a considerable time. Some of the coins, Sir G. Hill remarks, were clipped, but only eleven, ranging from Jovian to Arcadius (3 coins), so badly that their mint-marks were indecipherable.

ICKLINGHAM II.

I mentioned above a "mixed hoard" also from Icklingham which I ventured in 1929 to date "a little later" than the traditional 395 solely on the ground of the preponderance of Honorius and of the degraded *Æ 4 Salus reipublicae* issue from Rome. I am inclined now to date it with the two following hoards on the evidence from Mediolanum. This "mixed hoard" contained one *Virtus Romanorum* MDPS coin of Theodosius to two of Arcadius and three (all clipped) of Honorius. There were two more of this type for Honorius with the mint-marks, which can only have been MDPS, entirely cut away.

COLERAINE (DATED BY COIN OF CONSTANTINE III) AND TERLING.

Unfortunately the Coleraine hoard was badly described, partly owing to its large proportion of clipped coins. But it will serve our present purpose, which is

to gather evidence for dating the Terling hoard. The two hoards are very similar in essential points. At Mediolanum Theodosius has almost disappeared, Arcadius and Honorius are strongly represented; Honorius, when we have added to his 45 *Virtus Romanorum* MDPS coins the 17 "TRPS" misread, no doubt, from badly clipped coins, has roughly double the number of his brother's coins, as at Terling. But the date at which the above ratio of 1:2 for Arcadius and Honorius seems to be normal is settled for us in the Coleraine hoard as not earlier than 407-11 by the coin of Constantine III. Strangely enough this is matched in the Terling hoard by the unique *Urbs Roma* TRPS coin of Honorius. I know of nothing by which to place it, but it obviously has no relation to the workmanship of the Treveri mint which was closed c. 393. A barbarous *Urbz* (sic!) *Roma* TRPS coin is sufficiently like it to suggest that it was copied from some such coin. I think it must have been struck during one of the sporadic reopenings of the Treveri mint by the usurpers of the early fifth century.¹⁴

The gold coins of the Terling hoard give strongly corroborative evidence. In the Dortmund hoard of 430 coins described by Dr. Regling, the type, *Victoria Auggg* $\frac{M | D}{COMOB}$ "Emperor standing with foot on captive", occurs as follows:—one of Theodosius I, thirty-

¹⁴ Honorius recognized Constantine III in 409, cf. Zosimus, V, 43, ἐκπέμπει δὲ αὐτῷ καὶ βασιλικὴν ἐσθῆτα. That Constantine struck in the name of Honorius is shown by the *Siliqua Victoria Auggg* $\frac{M | D}{COMOB}$ in the possession of Mr. T. W. Armitage, who kindly allowed me to publish it in my list of the later coinage from Arelate.

three of Arcadius, fifty-three of Honorius. This hoard also is dated by a coin of Constantine III. In the Terling hoard out of 26 gold coins there are five of Arcadius and eleven of Honorius and none of Theodosius with this type and mint-mark.

I think the evidence clearly points to a date for the Terling coins at least as late as that of the Coleraine hoard, and incidentally it does away with the necessity felt by Sir W. Ridgeway (*J.R.S.*, xiv, p. 130) to ascribe the origin of the latter to Gaul rather than to Britain. The treasures hidden away early in the fifth century, A.D., included coins much later than has been generally assumed, and the Terling hoard has definitely added to our knowledge of the last years of the Roman occupation.

J. W. E. PEARCE.

VIII.

"FEL. TEMP. REPARATIO."

[SEE PLATES XVII-XVIII.]

THE words that give a title to this paper form the one unvarying legend of the reverse in a large series of Aes coins of Constantius II and Constans.¹ The coins are well known to all students of Roman numismatics. They occur freely in representative site-finds covering the fourth century, and were commonly imitated in ancient times. Yet not only do we lack anything like a complete record of the issue in its detail: we have not even a preliminary study, defining its general scope and intention. For the detailed study the time is not yet ripe, but it should not be premature to attempt the initial investigation, which will open the door to some, if not all, of its secrets.

The words "Fel. Temp. Reparatio" may be expanded either into (a) *Felix Temporum Reparatio*,² or (b) *Felicitium Temporum Reparatio*. Either form gives a good sense, and it is impossible to judge with certainty between them. Perhaps form (a) is more pregnant in meaning; a "happy renewal of times" implies that the times too will be happy, and this use of "felix" seems to fit in with the Roman cry of good

¹ Constantius Gallus (A.D. 351-354) and Julian II (as Caesar A.D. 355-360) share in the latest issue, with *rev.* type, warrior spearing horseman ("P.B." size). Gallus also has the "Galley" reverse in the larger size.

² I am indebted for this suggestion to my friend and colleague, Dr. G. C. Brooke.

luck on special occasions—"feliciter nuptiis", "good luck to the wedding", for example. In any case the words plainly speak of a great anniversary, one of those occasions on which optimists may hope to see the Golden Age unfolding its glories anew.³ If we recall to mind that our issue belongs to about the middle of the fourth century A.D., the special application of the words becomes obvious. They mark the great event of A.D. 348—the eleventh centenary of Rome. If we review the order of the bronze issues of the sons of Constantine after his death, we can soon confirm this result. For several years Constantine II, Constantius II, and Constans struck with the last type of their father, the reverse **GLORIA EXERCITVS**, two soldiers standing with one standard between them. In A.D. 340 Constantine II was defeated and killed by Constans, and the latter and his surviving brother, Constantius II, struck the new reverse **VICTORIAE DD. AVGGQ. NN.**, Two Victories standing *vis-à-vis*, holding wreaths and palms. This issue is not at all uncommon, if not quite as familiar as the **GLORIA EXERCITVS**, with its two variants of reverses, beginning in or before 330. The "Two Victories" reverse, then, must run for some five years at least from A.D. 340, and may perhaps extend as late as the year A.D. 348. But until we can check our coins more closely, we must leave open the possibility that the commemoration of the anniversary on coins began

³ No special study of the return of the Golden Age as a theme of Roman coinage has been published. Some very valuable suggestions are to be found in A. Alföldi's articles in *Num. Chron.*, 1929, pp. 218 ff. ("The numbering of the Victories of the Emperor Gallienus"), and *Hermes*, 1930, pp. 369 ff.

a little in advance of the actual event.⁴ Before we discuss the special features of the anniversary of A.D. 348, it will be useful to review very briefly the Roman practice in similar celebrations of earlier dates.

Celebrations of anniversaries of many kinds were familiar to the Roman, particularly under the Empire, for the vows undertaken at regular intervals for the emperors. Here, however, we must limit our inquiry to the greater celebrations of less frequently recurring events—such beginnings of new ages (*Saecula*) as could fittingly be celebrated by "*Ludi Saeculares*", "*Secular Games*". In Roman history we find "*Saecula*" of two kinds.⁵ The one is the Etruscan "*Saeculum*", usually reckoned as 110 years, celebrated by "*Secular Games*" at irregular intervals, varying according to the terminus from which reckoning began. Such "*saeculares*" were certainly held in 249 and in 149 (or 146) B.C.—other celebrations are reported, but lack satisfactory corroboration. A repetition of this festival fell due about 46 B.C. in the lifetime of Julius Caesar. The occasion was omitted, but the thought of the new "*saeculares*" remained in men's minds, and when Augustus had succeeded in giving peace to Rome he could use it as a symbol of his life-work. He accepted the mission assigned to him by Virgil of the hero

Who shall found again the golden age in fields once ruled by Saturn.⁶

⁴ As was the case at the ninth centenary of Rome in the reign of Antoninus Pius: see Miss J. Toynbee in *Class. Rev.*, 1925, pp. 12 ff.

⁵ See article "*Saeculares Ludi*" in Pauly-Wissowa, *Real-Lexikon*.

⁶ Virgil, *Aeneid* vi, vv. 792 ff. Anchises speaks to Aeneas in the shades, prophesying of Augustus, "*hic vir, hic est, tibi quem*

The year 17 B.C. was the actual date of Augustus' "saeculares"—how his experts proved it to be the correct year is not quite clear, but fortunately does not concern us here. Domitian in A.D. 88 continued the "saecular" series of Augustus, and Septimius Severus in A.D. 204 that of Domitian. The three celebrations of 17 B.C., A.D. 88, and A.D. 204 had much in common. All celebrated the "Ludi Saeculares Latini"; all had the same framework of ritual, sacrifices by day to Jupiter and Juno, Apollo and Diana, sacrifices by night to the Moirae, the Ilithyiae, and Terra Mater. In all there was a consciousness of something Etruscan in origin and of a propitiation of the infernal powers. All three were commemorated in the coinage—the games of Augustus in 17 B.C. by aurei and denarii of M. Sanguinius, showing the herald of the games; by aurei of L. Mescinius Rufus, showing Augustus distributing purifying elements ("suffimenta") to the people, and denarii of the same moneyer, showing a column celebrating the games, and by aurei struck in Spain, showing Augustus making a sacrifice in inauguration;⁷ those of Domitian in A.D. 88 by aurei and denarii, showing the herald, and by denarii showing the commemorative column, and by sestertii, dupondii, and Asses illustrating all⁸ preparatory ceremonies and sacrifices; those of Severus in A.D. 204 by aurei, denarii, sestertii, and Asses,

promitti saepius audis, | Augustus Caesar, divi genus, aurea condet | Saecula qui rursus Latio, regnata per arva | Saturno quondam".

⁷ *B.M.C.*, *Emp.*, pp. civ f., cxiii, p. 13, nos. 69 ff., p. 16, no. 85, p. 17, no. 89, p. 74, no. 431.

⁸ *B.M.C.*, *Emp.*, ii, pp. xcv f., p. 326, nos. 130 ff., p. 392, nos. 419 ff.

showing a sacrifice for the games and also the patron gods of Severus himself—Bacchus and Hercules, whose cult was on this occasion worked into the secular ritual.⁹ “Saecular” games were also celebrated by Gallienus, Carausius, and perhaps Maximian; but they were of minor importance and must not detain us here.

The other “saeculum” celebrated by the Romans was the term of one hundred years, used as a measure of the antiquity of Rome—centenaries, in fact, “urbis conditae”. The Republican celebrations of 249 B.C. and 149 or 146 B.C., discussed above, fell curiously near the required date.¹⁰ But the first centenary, which we know to have been celebrated as such, was the 800th year of Rome, celebrated by Claudius in A.D. 48. The occasion must have given free scope to his antiquarian interests and his passion for Etruscan and religious lore; but, rather curiously, he seems to have struck no special coins for the occasion. Antoninus Pius did not fail to repeat the celebration at the 900th year of Rome, in A.D. 148. His references to the occasion on the coins emphasize the mythological, rather than the religious character of the event. We may cite the aureus showing Mars descending to visit Rhea Silvia, the sestertii showing she-wolf and twins or Aeneas carrying Anchises, or the great sow and her young,¹¹ and the fine series

⁹ Cohen, 105 ff.

¹⁰ The years A.D. 148, 248, 348 were reckoned as 800th, 900th, and 1,000th year. 754 B.C. is taken as foundation year of Rome. Hadrian's aureus of A.D. 121 is A.V.G. 873/4—the new year, 874, begins on April 21st.

¹¹ Mattingly and Sydenham, iii, p. 37, no. 99 = C. 1073. M. and S., p. 108, no. 603 = C. 174, 5. M. and S., p. 109, no. 615 = C. 655; n. 629 = C. 775. M. and S., p. 111, no. 631 ff. = C. 768.

of medallions showing such scenes as the landing of Aeneas on the banks of the Tiber.¹²

The tenth century, the "miliarium saeculum", fell to be celebrated by Philip the Arabian, a man suspected in ancient times of sympathy for, or even active participation in, Christian belief, certainly no ardent pagan. His celebration of the event of A.D. 248 seems to have been confined to satisfying the demands of the people for a show, rather to the neglect of any religious appeal. His coins show temple and column in honour of the games, the beasts exhibited in the arena to the people and the she-wolf and twins of legend.¹³ With the eleventh centenary we come to A.D. 348, the year of our issue. It may be observed that as 1,100 is not only 11 times 100, but also 10 times 110, the 1,100th year of Rome could be regarded, if you so pleased, as the point where the two series of "saecula" of 100 and of 110 years met and were reconciled.

We can now consider our issue of A.D. 348 in more detail. The types, linked by the common legend FEL. TEMP. REPARATIO, are the following:¹⁴

- (1) "M.B."—coins of about 0.95 in. (24 mm.), and about 90 gr. (5.6 grm.) weight.

- (a) Warrior standing l., about to plunge his spear into horseman fallen beside his horse and raising hand in appeal.

[Pl. XVII. 3, 5, 6, 7, 8, 12, 13.]

¹² Cp. Gnechi, *I medaglioni Romani*, vol. ii, p. 20, no. 99; others show Hercules as slayer of Cacus and patron of ancient Rome, *op. cit.*, p. 19, no. 90 ff.

¹³ Cohen, Philip I, 95 ff., 172 ff.; Otacilia Severa, 62 ff.; Philip II, 20, 72 ff.

¹⁴ See Cohen, Constantius II, 30 ff.; Constans, 9 ff.; Constantius Gallus, 4 ff.

- (b) Warrior advancing r., leading a small figure (a barbarian?) from a hut beside a tree (?).
[Pl. XVII. 15-17, 19-24.]
- (c) Victory steering Emperor, who holds phoenix on globe and labarum, l. in boat.
[Pl. XVIII. 1-3, 5, 6.]
- (d) Emperor standing l., holding labarum and leaning on shield; to l. two captives. [Pl. XVIII. 12.]
- (d) Var. As (c), but Emperor advancing l.
[Pl. XVIII. 13, 14.]
- (e) Emperor on horseback r., thrusting spear at foe-man.
[Pl. XVIII. 15.]
- (2) "P.B." coins of about 0.75 in. (18 mm.), and about 38 gr. (2.47 grm.) weight.
 - (a) Warrior about to plunge spear into fallen horse-man, as on 1 (a). [Pl. XVII. 4, 11, 14.]
 - (b) Warrior leading barbarian (?) from hut, as on 1 (b).
[Pl. XVII. 18, 25.]
 - (c) Victory steering Emperor, as on 1 (c).
[Pl. XVIII. 4, 7, 8.]
 - (d) Phoenix on rock or globe. [Pl. XVIII. 9, 11.]

Types 1 (*a-c*) are found at all mints, but (*a*) is more characteristic of Constantius II, (*b*) and (*c*) of Constans;¹⁵ both (*b*) and (*c*) are commoner in the West than in the East. Types 1 (*d*, *d* var., and *e*) are only found at a few mints.¹⁶ Type 2 *d* is represented in the B.M. Collection at many, but not all, mints.¹⁷

¹⁵ In the B.M. collection, in the Eastern mints generally, Constans has type 1 *b*, not 1 *a*, while Constantius II and Constantius Gallus have 1 *a*, not 1 *b*.

¹⁶ Viz. Rome (1 *d*, *e*), Aquileia (1 *d*), Constantinople (1 *d*, var.), Cyzicus (1 *d*, var.), Nicomedia (1 *d*), Antioch (1 *d*, var.), Alexandria (1 *d*).

¹⁷ Viz. Treveri, Lugdunum, Siscia, Constantinople, Cyzicus, Nicomedia, Antioch.

Type 2 *c* is less common. Type 2 *b* is rare.¹⁸ Type 2 *a* is general over the Empire, but probably is later in time than 1 *a*; it is found in an intermediate size, sporadically at most mints, most noticeably at Aquileia where it bears the mark LXXII (Pl. XVII. 9, 10). The meaning of the mark is uncertain; perhaps "72 to the pound" is the best guess up to now.¹⁹ The size of these coins is about 0.85 gr. (21.5 grm.), the weight about 72 gr. (4.66 grm.).

The general theme of the coinage is the happy anniversary, the beginning of a new age of gold. The types, then, while obviously not as directly related to the legend as types usually were in the early Empire, must in some way bear on the one central idea that binds them together. The phoenix (2 *d*), the bird that is re-born from its own ashes, is a natural and obvious symbol of the renewal of the times.²⁰ The types that show the emperor as victorious soldier in battle (1 *a*, *e*, 2 *a*), or as conqueror after battle with his captives by his side (1 *d*, *d* var.), give a clear meaning—the military prestige of Rome is being vindicated once again. Victory steering the emperor in a boat (1 *c*, 2 *c*) is a not unnatural symbol of the successful government of the state. The warrior spearing the fallen horseman (1 *a*, 2 *a*) will serve as a type of the legionary overthrowing the Persian cavalry,²¹ and the similar warrior leading a small

¹⁸ Type 2 *b* is found, e.g., at Arles, type 2 *c* is found, e.g., at Lugdunum, Arelate, Siscia, Thessalonica.

¹⁹ Cp. *R.N.*, 1897, pp. 3 ff.; *Bl. f. Münzfr.*, 1923, pp. 314 ff.

²⁰ Cf. the phoenix on reverse of Divus Traianus, M. and S., ii, p. 343, nos. 27 f. = C. 658, 9.

²¹ For the Persian wars of Constantius II see *Cambridge Mediaeval History*, i, pp. 57 ff.

figure from a hut (1 *b*, 2 *b*) may be interpreted as a like legionary constraining the barbarian to leave his forest home for settlement in the Empire. It is clear, however, that these explanations at least do not exhaust the meaning of the types; especially do we feel that, even if we are near to understanding the types individually, we have not found the cord that binds them together.

It may help us to penetrate deeper into the question if we recall to mind the religious conditions of the age. Christianity is definitely victorious in the state—not yet an active persecutor of paganism, but already drawing special privileges to itself. Both emperors, Constantius II and Constans, in East and West are Christians—but Constantius II is inclined to Arianism, while Constans favours Athanasius; the strength of unity is sapped by schism.²² Paganism is, of course, enormously strong in its silent grip on men's thoughts and emotions; even Christians slough their paganism but slowly, while unrepentant pagans still play a large part in official life and are dominant in Rome itself. Under these circumstances a kind of tacit truce is observed on both sides. Paganism recedes, but Christianity does not push too rudely into its place. So on the coins there is a tendency to choose types of general political or military character, with slight reference to religion.²³ Thus in our own series the

²² *Cambridge Mediaeval History*, i, pp. 118 ff., especially 128 ff.

²³ Cp. the **GLORIA EXERCITVS** of Constantine I, the **VICTORIAE DD. AVGG. Q. NN.** of his sons, the many types of **SALVS** or **SPES REIPUBLICAE**. Christianity is only represented by symbols in the field, a cross or monogram of Christ.

emperor is definitely marked as Christian by the labarum, the standard with the monogram of Christ, which he bears, but there is no further sign of Christianity on the coins, and the Victory who steers him is, if we press the point, a pagan goddess.²⁴ The old pagan ceremonial was, of course, omitted. Aurelius Victor (28) actually complains of the neglect of such rites: "et quoniam nomen admonuit, mea quoque aetate post mille centesimus consule Philippo excessit nullis ut solet sollemnibus frequentatus: adeo in dies cura minima urbis Romanae." As between Christian and pagan, so between Arian and Athanasian, the balance seems to be held steady. The use of the monogram of Christ, as main type, with legend **A Ω, SALVS DD. NN. AVG. ET CAES.**, by Magnentius, may have been aggressive against the Arians, but the use of the labarum was probably acceptable to all parties.

Does the clue to our series, then, lie in a realm of thought common to pagan and Christian—that of the Messianic Eclogue of Virgil, in fact? The memory of the famous prophecy lasted down through the Empire. It was still fresh in the reign of Gallienus.²⁵ A commentary on the poem is attributed to the great Constantine himself. It is quite probable, then, that on this great occasion of renewal, the authority for the selection of coin-types and legends might turn thither for inspiration. Let us test the possibility by setting poem and coins side by side. Virgil,²⁶ we

²⁴ These goddesses—Victoria, Felicitas, and the like—though pagan, were perhaps more easily harmonized into the Christian scheme than the Olympian gods.

²⁵ Cp. Alföldi, *Num. Chron.*, 1929, pp. 265 ff.

²⁶ Virgil, *Eclogue IV*, vv. 34 ff.

remember, foretells the coming birth of a child, with whose growing the new age will grow and the world will move back through imperfections to its primeval perfection. The old heroic age will come again:

“alter erit tum Tiphys, et altera quae vehat Argo
delectos heroas: erunt etiam altera bella:
atque iterum ad Troiam magnus mittetur Achilles!”

The type of the emperor steered by Victory comes to mind. The metaphor of the ship of state was not yet a commonplace, in the engraver's art at least, and it would add meaning to the types if there were a suggestion in it of a new adventure in the unknown seas of the new age. The type of the warrior spearing a fallen horseman would serve well for the great Achilles in the Trojan war. The warrior can hardly be a pagan Mars,²⁷ while, on the other hand, he plays almost too prominent a part for a mere legionary. It is better that he should be not a simple “unknown warrior”, but a warrior of fame. His fallen victim, with peaked cap, will represent either Trojan in legend, or Persian, in the modern application of the type. It is over the third type of warrior leading a figure from a hut(?) that the serious test comes. If our theory can determine the true meaning here, it has strong claims to consideration. There are four uncertain elements in the type. The small figure—is he a barbarian or some one else? Is he being led by gentle constraint or roughly dragged? The hut—is it such indeed, or something quite different? And is the tree, behind him, a symbol of barbarian forests or not? A new and interesting suggestion has recently reached me to the effect that

²⁷ But see below.

the "hut" is a threshing plough, such as are still used in North Africa, set up on end, and that the "tree" is a large corn-ear. I do not think the suggestion can actually be correct, but it is attractive because of its novelty and because of the uncertainty that still hides the real meaning.²⁸ Is it possible to trace again the thought of the *Eclogue* and to see in the type a soldier leading the growing boy of the *Eclogue* to learn his "tirocinium" in war, half reluctantly leaving behind his cradle—the cradle which had flowered for him²⁹—"ipsa tibi blandos fundent cunabula flores"?³⁰ Or, if we risk a more pagan solution, can we say that Mars is leading his son Romulus from the "casa Romuli" beside the *ficus ruminialis* to enter on his military career?³¹ The small figure is not, as a rule at least, marked out by dress or feature as a barbarian, and the soldier leads rather than drags him. It is advisable to be cautious in accepting such interesting, but unproved suggestions as these. Perhaps it is not too much to claim that we have shown that the author of our type may have been familiar with the thought and imagery of Virgil's poem.

The interest of our series is not, however, exhausted in the study of its types. It certainly represents a reform of the system of coinage, none the less

²⁸ Letters in B.M. from Mr. Theodore Fisher of Bungay, March 1932.

²⁹ Virgil, *op. cit.*, v. 28.

³⁰ *Ibid.*

³¹ The tree is not unlike that on the bronze medallion of Antoninus Pius (Gnecchi, *I medaglioni Romani*, ii, p. 19, no. 92), where Hercules is standing beside a hind feeding a child. My friend, Mr. J. W. E. Pearce, whom I have to thank for advice on many points in this paper, sees in the type a suggestion of the policy of mercy, "parcere subiectis".

interesting and important because the detail of it is nowhere recorded. The change of system is obvious at once from the coins. The two denominations, "M.B." and "P.B.", of the "Fel. Temp. Reparatio" are new to the coinage, and seem to push out of circulation the smaller coin, "Victoriae DD. Auggq NN." (about 0.7 in. (17 mm.) in size and 23 gr. (1.5 grm.) in weight) that preceded them. The "P.B." might be considered as a revival of the common coin of Constantine I with such types as "Beata Tranquillitas"; for the "M.B." there is no parallel, unless we seek it in one stage of the reduction of the *follis* of Diocletian.³² Magnentius, when he rebelled, apparently struck the two "Fel. Temp. Reparatio" sizes and a new and larger coin of his own, about 1.1 in. (37.5 mm.) in size and about 116 gr. (7.53 grm.) in weight. When Magnentius fell, Constantius II apparently abandoned his own larger pieces of "M.B." size and struck the "Fel. Temp. Reparatio" type, warrior spearing horseman, in the second ("P.B.") size only. An intermediate stage of the coin, between M.B. and P.B., is found at Aquileia, with the mark LXXII across field, perhaps denoting the number of pieces struck to the pound.³³

This evidence in itself suggests a reform of the coinage which first proves unsuccessful and is then finally abandoned. Finds amply confirm this conclusion. The only "Fel. Temp. Reparatio" type that continued commonly in later circulation is the warrior spearing horseman, in its reduced "P.B." size. All

³² With normal reverse type "Genio populi Romani". The coin fell to about the size of our M.B. after c. A.D. 307.

³³ See above.

coins of the "M.B." type are definitely very rare in site-finds. As regards hoards, too, the larger "Fel. Temp. Reparatio" pieces of Constantine II and Constans are found only in closed hoards, usually mixed with coins of Magnentius and Decentius.³⁴ Clearly, then, the coinage of A.D. 348 to 353 was an unsuccessful experiment and was withdrawn from circulation, probably by edict.³⁵ Before considering the political meaning of the reform and its abandonment, let us try to recover some of the detail of the reform itself.

There was no change in the gold coinage; the solidus, the 1/72nd part of a pound, continued to be struck as before. Of the silver we cannot speak with the same confidence until the order of issues has been more accurately determined. But it appears that, while the coin of old denarius weight was still struck,³⁶ the larger denominations, the coin of about 70 gr. (4.94 grm.), and the still larger one of about 210 gr. (13.6 grm.), began for the first time to be issued regularly and in quantity. The siliqua, 1/1728th of the gold pound, was already well known as a value, if not as a coin.³⁷

³⁴ Cp. Cobham Park (*Num. Chron.*, 1885, pp. 108 ff.); Croydon (*Num. Chron.*, 1905, pp. 36 ff.); Cologne (*Z. f. N.*, 1930, pp. 25 ff.).

³⁵ See below.

³⁶ Nominally it weighs 1/96th of a pound; in practice it is almost always some grains lighter. In this size both Constantius II (C. 30) and Constans (C. 50) show a reverse **FEL. TEMP. REPARATIO**, Victory standing r. inscribing **VOT. XX** on shield (Pl. XVII. 1), supported by kneeling captive (Rome), and Constantius strikes with the same legend and type, Warrior spearing fallen horseman (Lugdunum, B.M., Pl. XVII. 2).

³⁷ According to the latest theory, ably championed by Dr. Mickwitz, *Die Systeme des römischen Silbergeldes im IV. Jhdt. n. Chr.*, the coin of 1/96th lb. was the original siliqua, the piece that we usually so describe, a half-siliqua of increased weight.

The term *miliarensis*, however, occurs nowhere before the second half of the fourth century A.D.,³⁸ and, whether or no the coin it represented was new, the name, on all our evidence, certainly was. If we turn to the copper, we find two new names of coins appearing for the first time about the date of the reform—the *pecunia maiorina*³⁹ and the *centenionalis*.⁴⁰ It is difficult to avoid the conclusion that *miliarensis*, *pecunia maiorina*, and *centenionalis* all belong to the new money-system. The *miliarensis* can be nothing but the piece actually weighing 70 gr. or less (4.54), but of the theoretical weight of 1/60th of a pound.⁴¹ The *pecunia maiorina* and *centenionalis*—not two coins, but alternative names of one coin—stand for the larger “Fel. Temp. Reparatio” piece.⁴² The *miliarensis* is a piece of 1,000 units, the *centenionalis* one of a 100; the *miliarensis* contains 10 *centenionales*.⁴³ The solidus

³⁸ Cp. Hultsch, *Scr. Metrol.*, i, pp. 266 and 269 (Epiphanius). *Notitia Dignitatum*, Orient, xiii. 30, West, xi. 196, *scrinium a miliarensibus*.

³⁹ Cod. Theod. IX. 21. 6; 23. 1.

⁴⁰ Cod. Theod. IX. 23. 1.

⁴¹ Cp. Evans in *Num. Chron.*, 1915, pp. 453 ff. Cod. Theod. XV. 9. 1.

⁴² An edict of A.D. 349 forbids the separation of the silver from the Aes in the *maiorina pecunia*. An edict of A.D. 356 forbids the selling of “*pecunias quas more solito maiorinas vel centenionales communes appellant, vel ceteras quas vetitas esse cognoscunt*”. The *centenionalis* cannot be the smaller coin of “P. B.” size, for that is spoken of apart, earlier in the edict, as “*Nummus . . . qui in usu publico perseverat*”.

⁴³ The evidence is in the main linguistic and is decisive—“*miliarensis*” and “*centenionalis*” should mean “piece of a thousand”, “piece of a hundred units”; the converse use, “one of a thousand parts”, is secondary and rare. Cp. L. Blancard in *R. N.*, 1888, pp. 417 ff. (he goes astray on the ratio of gold to silver); Babelon, *Traité des Monnaies grecques et romaines*, champions the view that the *miliarensis* is 1/1000th of the gold pound.

contains 12 *miliarensia* and also 6,000 small copper units or *nummi*. The *miliarense*, then, contains 500 *nummi* and 1,000 *half-nummi*. The use of this smaller unit is the most obscure part of the whole system, but its existence is proved by the word *miliarense* itself.⁴⁴ The origin of the names *miliarense* and *centenionalis* becomes clear at last. It was actually the occurrence of the thousandth and hundredth year of Rome that suggested the application of the "thousander" and "hundreder" as names to new coins; the use of large units in multiples of ten of smaller units was native to the later Roman metrology.⁴⁵ The *centenionalis* (or *pecunia maiorina*) is no mere bronze coin, but a coin with a slight silver alloy and—originally—a bright silvery face. It was treated as, so to say, a nickel piece, and tariffed in terms of the silver accordingly. Another name for the *centenionalis* was the *decargyrus nummus*, because it was 1/10th of the silver *miliarense*. An edict of A.D. 395 left the *centenionalis* in circulation, while it called in the *pecunia maior* (not *maiorina*), the large piece of Julian and his successors.⁴⁶ The money-system of A.D. 348 then was:

⁴⁴ Blancard, *op. cit.*, tries to make the unit the ordinary *nummus*, the 6000th part of the *solidus*. This, of course, involves a relation of gold to silver that never existed in the fourth century (1 *solidus* = 6 *miliarensia*).

$1/72\text{nd lb. } A = 6 \times 1/60\text{th lb. } AR, A : AR :: 7.2 : 1.$

⁴⁵ We need only quote the *solidus* of 6,000 *nummi*, the later *miliarense* and siliqua of 500 and 250 *nummi* respectively.

⁴⁶ Cod. Theod. IX. 23. 2: "centenionalem tantum nummum in conversatione publica tractari praecipimus, maioris pecuniae figuratione submota. Nullus igitur decargyrum nummum alio audeat commutare, sciens fisco eandem pecuniam vindicandam, quae in publica potuerit conversatione deprehendi."

Pecunia Maior is not the same as *Pecunia Maiorina*. It was

- 1 gold pound = 72 *solidi*.
- 1 *solidus* = 12 *miliarensia*.
- 1 *miliarensis* = 1,000 *half-nummi*.
- 1 *centenionalis* = 100 *half-nummi*.
- 1 *miliarensis* = 10 *centenionales*.
- 1 *solidus* = 6,000 *nummi* = 12,000 *half-nummi*.

The reform of the coinage must have had a specific purpose—probably the age-old purpose of relieving the financial difficulties of the government. It would be in the mass issue of the *centenionales* or *pecuniae maiorinae* that the profit would come. These coins, weighing not much more than a *solidus*, would, as bronze, be worth only about 1/1800th part of it.⁴⁷ As coins, however, thanks to a very slight admixture of silver,⁴⁸ they passed as the 1/120th of a *solidus*—a rate obviously very profitable to the government. Resentment of this financial oppression was probably one of the causes of the fall of Constans. Magnentius may have promised to relieve the trouble, but, in his coinage as we at present know it, there is no obvious sign of reform. Perhaps he could only promise, and had no time to fulfil. After the overthrow of Magnentius, Constantius appears to have called in the offending money and left one coin only in circulation, the “P.B.” of Constantinian pattern. Even in our fragmentary tradition it is plain that the coinage of mixed metal was a continuous source of trouble in the fourth century. It was an opportunity for fraud, both against the subject by the state and against the state

the largest piece, not the piece of second size (our M.B.) that disappeared from circulation.

⁴⁷ On the base of the equation, 1 *solidus* = 25 lbs. of Aes (Cod. Theod. XI. 21. 2).

⁴⁸ Cp. Cod. Theod. IX. 21. 6, A.D. 349.

by the false moneyer. The trouble can be divined from the transition from coin to coin. Thus the *folles* of Diocletian, practically speaking, disappeared from circulation; it comes down to us only in a number of great closed hoards. So too with the *centenionalis*, or *pecunia maiorina*, in A.D. 356, with the *pecunia maior* in A.D. 395, and with other coins that we cannot trace so clearly, e.g. the "aes dichoneutum" of the edict of A.D. 371 (Cod. Theod. XI. 21. 1). After Constantius II the *centenionalis* was restored under Gratian; the larger piece of Magnentius and Julian was for a time struck in mass, then suspended from issue, then in 395 withdrawn from circulation. If we are sometimes inclined to regard the coinage of the fourth century, because of its abundance of gold, as an advance on that of the early third or even of the later second century B.C., we should remember the general character of fourth-century government—fiercely defensive of the state, but ruthless in its demands on the private citizen. The ample issues of gold and silver will have been more for the advantage of government than of private traders. The inferior coinage will have been used, as so often, as a form of additional and irregular taxation.

The last chapter of the "Fel. Temp. Reparatio" issue has still to be written. The one type, of warrior spearing fallen horseman, outlasted the rest, and was struck in the "P.B." size down to the death of Constantius II. Beside the regular issues appears a multitude of imitations, of all varieties of size and barbarism—from the normal down to the minutest, from the correct down to the most uncouth. Some of these imitations, of size nearly normal, but decidedly

barbarous style, are not uncommonly found overstruck on normal "Gloria exercitus" or similar coins of the latest period (A.D. 330-337) of Constantine I (Pl. XVIII. 24-26). These imitations occur freely almost wherever Roman coins are found in England. They occur in site-finds such as Richborough, and in hoards such as Lydney I,⁴⁹ Lydney II,⁵⁰ and Covesea, Morayshire.⁵¹ Lydney I—presumably buried c. A.D. 365—showed no regular coin later than Constantius II, but masses of barbarous imitations of our type. Lydney II—presumably not earlier than mid-fifth century at earliest—contained masses of minute and barely recognizable renderings of one or other scrap of the same reverse. Morayshire showed a predominance of barbarous imitations of "Fel. Temp. Reparatio"—not seriously reduced in size—among Roman coins going down to the sons of Constantine. Two views of these imitations seem possible:

(a) We may regard them as essentially a contemporary phenomenon, produced by special local conditions, or, possibly, by local reaction to government regulations. The overstrikes on normal coins of late Constantine I might be regarded as an unofficial re-coinage of an official coinage that was being called in.

(b) We may prefer to regard them as mainly of later origin—beginning, perhaps, before the normal issue had ceased, but continuing for an indefinitely

⁴⁹ R. E. M. and T. V. Wheeler, *Report on the Excavations . . . in Lydney Park*, Oxford, 1932.

⁵⁰ *Ibid.*

⁵¹ Miss Benton, *Proceedings of the Society of Antiquaries of Scotland*, 1930-1931, pp. 177 ff.

long period after. We should then claim that this coin, the last issue of the great house of Constantine the Great, with its suggestion of the restoration of past happiness, had a particular hold on men's affections, that it was thus kept in unofficial circulation during the remainder of the Roman occupation, and that, even after the break with Rome had widened, it continued as one of the talismans of the Romano-Briton, who still held fast to the old allegiance. Constantine III, in particular, might well have an interest in keeping alive the old Constantinian coin. If there is truth in Mr. Collingwood's view that large country districts, even in the south, were lost to effective Roman occupation in the great Pictish invasion of the reign of Valentinian I, we might further urge that this was the latest Roman coin to be in effective circulation in those districts. It seems nearly certain, even if we incline to the earlier view, that some of the smallest imitations of the type fall outside the Roman period, and that the type was still familiar enough in the first half of the seventh century for the Anglo-Saxons to copy one of their sceattas from it.⁵² For the time it is not advisable to dogmatize on either side—it will be enough if we take the opportunity of illustrating the range of imitations (Pl. XVIII. 16–25), so as to make the problem intelligible to students. In any case, whether as a symptom of local unrest in the fourth century or of lingering attachment to the Roman memory in the fifth or sixth, the imitations of the "Fel. Temp. Reparatio" type form an interesting if inartistic end to a series of great historical significance.

⁵² Cf. F. S. Salisbury in *Num. Chron.*, 1927, pp. 119, 120.

LIST OF COINS ILLUSTRATED.

- Pl. XVII. 1. Constantius II. Rome. *Æ*.
 2. Constans. Lugdunum. *Æ*.
 3. Constantius II. Treveri. *Æ*.
 4. " " Lugdunum. *Æ*.
 5. Constans. Lugdunum. *Æ*.
 6. Constantius II. Arelate. *Æ*.
 7. " " Rome. *Æ*.
 8. " " Aquileia. *Æ*.
 9. " " " *Æ*.
 10. Constantius III Gallus. *Æ*.
 11. Julian II. Siscia. *Æ*.
 12. Constantius II. Constantinople. *Æ*.
 13. " " Antioch. *Æ*.
 14. Constantius III Gallus. Alexandria. *Æ*.
 15. Constans. Treveri. *Æ*.
 16. Constantius II. Treveri. *Æ*.
 17. Constans. Lugdunum. *Æ*.
 18. " Arelate. *Æ*.
 19. Constantius II. Rome. *Æ*.
 20. Constans. Rome. *Æ*.
 21. " Aquileia. *Æ*.
 22. " Constantinople. *Æ*.
 23. " Constantinople. *Æ*.
 24. " Antioch. *Æ*.
 25. Constantius II. Alexandria. *Æ*.
- Pl. XVIII. 1. Constantius II. Treveri. *Æ*.
 2. Constans. Treveri. *Æ*.
 3. " Lugdunum. *Æ*.
 4. Constantius II. Arelate. *Æ*.
 5. Constans. Rome. *Æ*.
 6. " Aquileia. *Æ*.
 7. Constantius II. Siscia. *Æ*.
 8. Constans. Siscia. *Æ*.
 9. " Treveri. *Æ*.
 10. Constantius II. Lugdunum. *Æ*.
 11. " " Siscia. *Æ*.
 12. " " Rome. *Æ*.
 13. " " Constantinople. *Æ*.
 14. Constans. Alexandria. *Æ*.
 15. Constantius II. Rome. *Æ*.
 16-23. Imitations of Constantius II or Constans, types 1 a, 2 a.
 24-25. Similar, but overstruck on earlier coins.

IX.

CLAUDE AUGUSTIN DE SAINT URBAIN, FORGER OF ROMAN COINS.

[SEE PLATES XIX-XX.]

IN rearranging and listing the collection of dies preserved in the Vienna Cabinet, 46 dies for Roman coins were found which were handed over to Direktor Loehr by my predecessor Dr. Münsterberg when he decided to take over into the coin collection the great collection of dies in the Vienna Mint. In the inventory made by Kenner in 1875 they are described under forgeries nos. 1064-1085 as "dies by St. Urbain", whilst in the collection of forgeries we have strikes from these dies in lead and a descriptive label in the hand of Direktor Steinbüchel¹ (who worked in the Department of Coins and Antiquities from January 19, 1809, to March 10, 1840): "Lamellae plumbeae typariorum ab excell. artifice St. Urbain factorum: typaria in Mus: Caes: adservantur."

Who, then, in the first place was St. Urbain? According to Forrer, *Biographical Dictionary of Medallists*, v, 304 ff., there were two medallists of this name, Ferdinand the father and Claude Augustin, the son. The daughter Marie Anne need not be considered here. From the circumstances of their lives it is, however, quite clear that only the son need be considered in connexion with our forgeries. Of the two works cited

¹ According to the distinguished palaeographer Hofrat Banko, the writing is of the period of Steinbüchel's youth.

by Forrer I have only used that of Henri Lepage, *Ferdinand de Saint-Urbain*, which contains a brief section on the son. The possibly important work² of F. E. (Friedrich Exter) *Vornehmste Lebensumstände des Ferdinands von St. Urbain*, Nürnberg, 1770, I have not found in Vienna, but a synopsis is given in Amon, *Sammlung berühmter Medaillieurs, etc.*, Nürnberg, 1778. Fiala, *Katalog der Münz- und Medaillensammlung*, has also used this book.³ The rest of the literature in Forrer refers only to the father, as there is apparently no separate monograph on the son.

Claude Augustin was born on February 19, 1703, in Rome, the son of the Papal medallist Ferdinand de St. Urbain.⁴ The father came from Nancy and returned there in the following year, having spent over 30 years in Italy. Claude Augustin learned from his father the art of engraving and, like his father, became celebrated.⁵ He worked with his father and is described as "graveur de la monnaie de S.A.R." But this title does not mean much, as Lepage, *op. cit.*, p. 36, observes. Then something happened—about which Amon is silent, and perhaps also Exter before him—which throws a very significant light on his character. He forged three important documents and actually imitated the signature of the Duke Francis III, afterwards

² I have recently examined Exter's work (Göttingen University Library copy), but found nothing new in it.

³ Vol. iv, p. 1790 ff.

⁴ So Lepage: according to the notice of his death, mentioned in note 7, he was not born till 1705.

⁵ We find Arneth in his *Catalog der K. K. Medaillen-Stümpel-Sammlung*, 1839, p. 15, still saying that the skill of the two St. Urbains in engraving medals is so generally acknowledged that it needs no further praise from him.

husband of Maria Theresa. The reason is not given, but may be deduced from the remark of Mory d'Elvange.⁶ He calls him "trop ami de ses plaisirs". He escaped severe punishment through the favour of the Queen Regent Elisabeth Charlotte "tant en considération de sa famille qu'en faveur de la capacité et expérience singulière qu'il s'est acquises dans l'art de graveur". He was now compelled to work under the strict supervision of his father. But two years later he was again fully restored to favour. When Francis lost Lorraine in 1737, however, he chose to go with him to Vienna. Here Amon tells us he received the position of "Directeur et Graveur en chef des Médailles", but nothing is known of this elsewhere. Neither the list of Directors of the Mint nor that of chief engravers knows his name nor is he anywhere mentioned in the archives of the Mint. Amon's further statement that he made the large medal for the series of the Dukes of Lorraine in Vienna is wrong, as the set was already finished in 1731 in Nancy, as Beaupré shows in his *Catalogue* (Lepage, p. 86). According to Lepage he died on February 12, 1761, in Vienna; according to the Vienna register of deaths on February 10.

So much from the literary sources. Nowhere is there any mention of his having cut dies for ancient coins. The first thing to do obviously was to search the Vienna archives for references to Claude Augustin and the transference of dies and their registration in the Coin Cabinet. My colleague Dr. Dworschak undertook this arduous task and searched the Hofkammer archives, the state archives, especially those of Lorraine, the

⁶ *Essai Historique*, Nancy, 1785, p. 9, in Lepage, p. 37.

official correspondence of Francis I and the wills of the nobility, and, lastly, the city archives, a service for which I am especially grateful to him. Unfortunately there was nothing to be found except the brief reference to his death.⁷ So the story that he was granted a title seems hardly probable.

As the archives cannot help us, we must rely on the evidence of the dies themselves. We shall begin by giving a list of the existing dies. A small portion of the coins actually struck is in the Vienna collection, and others are in the collection of St. Florian monastery which is now in Vienna, as I am engaged in cataloguing this important collection. As soon as the dies were rediscovered, my voluntary assistant, G. Elmer, an accepted authority on Roman imperial coins, recognized at once that a suspicious Didius Julianus, which I had acquired as a St. Florian duplicate for the Vienna collection, was the work of St. Urbain, as were also two coins of Pupienus, one of gold hitherto regarded as genuine and another of silver from the Voetter collection (see below).

In the following list I have not followed the numbering of the inventory as there seems to be a good deal of confusion in it, but followed the chronological order of obverse and reverse:

C. = Cohen; B.M.C. = *British Museum Catalogue*; M.S. = Mattingly and Sydenham, *Handbook*; O. = obverse; R. = reverse; D. = double struck.

⁷ In the Vienna city archives we have under Feb. 10, 1761, the entry: "Herr Augustin St. Urben (*sic!*) K. K. Medallier ist am Tury (IX. Bezirk) im Bredbackerschen Haus an Lunglebrand beschaut worden, alt 55 Jahre, mittags um 11 Uhr verschieden" (information supplied by Dr. Geyer). The documents were destroyed in the Palace of Justice in the rising of July 15, 1927.

1. *O.* C MARIVS COS IVI(?) Head of Marius l.
R. VIC CIM Trophy with two prisoners.
 Inv. no. 1064. [Pl. XIX. 1.]
 Number on obverse indistinct, not fully struck; no specimen has so far been found. Rasche, *Lexicon*, iii, 1, p. 251, *Maria*, from Gusseme, v, 71. But the obv. is VII COS and rev. VICTORIA CIMBRICA. The piece is called a Paduan,⁸ and it might perhaps be ours; no ancient model known.⁹
2. *O.* C CAESAR COS PON N C Head of Octavian r.
R. C CAESAR DICT PERP PON MX Head of Caesar r.
 Inv. no. 1065. C. 21/2. B.M.C. II, 404. Bahrfeldt, *Die Röm. Goldpräg.* 44/28. *A.* [Pl. XIX. 2.]
 Errors: N for A, PON MX for PONT MAX No strike. No model known. All the Vienna specimens are too late (none acquired earlier than Tiepolo, 1824).
3. *O.* CAESAR AVGVSTVS Head laur. r.
R. M AGRIPPA PIATORINVS III VIR Head of Agrippa with mural crown.
 Inv. no. 1066. C. 177/2. B.M.C. II, 96. Bahrfeldt, 145/183. *A.* [Pl. XIX. 3.]
 Errors: Piatorinus, obviously from a defective original like B.M.C. LXXI, 7 where the L is only half visible. Otherwise the die is accurately copied from the much damaged Vienna specimen no. 4584. No strike known.
4. *O.* No legend. Head of Otho r.
R. SECVRITAS PR Securitas standing l.
 Inv. no. 1067. B.M.C. I, 166, 13 ff. C. 14-17. *A.*, *R.* [Pl. XIX. 4.]

The above die is incomplete, like the next; the emperor's head is remarkably small. The original might be a coin like Vienna no. 5971: no strike known.

⁸ This term is, of course, applied also to later forgeries. There is a good account of them in *Num. Chron.* 1843, p. 53 ff.

⁹ In Vienna there is an old forgery with COS VII, and the same head. *Rev.* VIC CIM, a different type.

5. *R.* PAX O Figure of Pax l. incomplete.

Inv. no. 1068. C. 2-5. B.M.C. I, 364, 1ff. *A*, *AR*.
[Pl. XIX. 5].

The full legend should be PAX ORBIS TERRARVM. Pax is without her branch. The engraver meant to finish the inscription first and put a branch into the space left. The original might be Vienna no. 5957. No strike known.

6. *O.* IMP NERVA CAES AVG PM TR POT F.

Head laur. r.

R. COS III PATER PATRIAE Sacrificial vessels.

Inv. no. 1069. C. 50/51. M.S. ii, 34. *A*, *AR*.
[Pl. XIX. 6.]

Errors: POT F for POT II Original probably
Vienna no. 7744. No strike known.

7. *O.* PLOTINA AVG IMP TRAIANI Bust r.

R. CAES AVG GERMA DAC COS VI PP Vesta
seated l.

Inv. no. 1070. C. 2/3. M.S. ii, p. 298, 730. *A*, *AR*.
[Pl. XIX. 7.]

Original Vienna no. 8631: a specimen in Vienna F.
2291 is of silver.

8. *O.* DIVA AVGVSTA MARCIANA Bust r.

R. CONSECRATIO Eagle standing l. looking r.

Inv. no. 1071. C. 3/4. M.S. ii, pp. 299, 743. *A*, *AR*.
[Pl. XIX. 8.]

The O of CONSECRATIO is clumsily engraved over the wing. Otherwise it is exactly copied from the Vienna gold quinarius no. 8643, which comes from the Carthusian collection. A specimen in Vienna (F. 2301), another in St. Florian (both *AR*).

9. [*O.* MATIDIA AVG DIVAE MARCIANAE F Bust
r. Die not in existence.]

R. PIETAS AVG Pietas sacrificing.

Inv. no. 1072. C. 8. M.S. ii, pp. 300, 758. *AR*.
[Pl. XIX. 9.]

One specimen in Vienna (F. 2314). In the *Numismata Cimelii Caesarai* (Vienna, 1755) a denarius of this type is quoted as genuine. Khell, on the other hand, in his *Supplementum* (Vienna, 1767) mentions only an *A* from de France and refers to a denarius from the collection of Apostolo Zeno, which Baldini gives in the Roman edition of Vaillant, but does not mention the Vienna denarius. Eckhel (*Doctrina Num.* vi, 471) also makes no mention of it. It had, therefore, by this time already been turned out as false, and must be the above-mentioned piece. But neither did Zeno's specimen pass into the Florian collection, so that it likewise must have been false. As there are five specimens of St. Urbain's forgery there, this specimen presumably was another like them. Equally suspicious is the gold piece from de France and the Moustier specimen mentioned by Cohen (1044) which from the reproduction might be from our die. Failing the appearance of a genuine original, this must be classed as a hybrid. St. Urbain was fond of such combinations, as the list shows.

It is very important for the dates of our forgeries that they only appear in the Roman edition of Vaillant (1743), while the first edition, which we only know from the reprint of 1682,¹⁰ does not have them.

10. O. L AELIVS CAESAR Head r.

R. S C A pyre.

Inv. no. 1072 (obv.) and 1072 (rev.). [Pl. XIX. 10.]

This piece, like no. 1, is a pure invention; the reverse is modelled on a large brass of Severus, though that has five tiers only, the sixth on the copy being the

¹⁰ Cf. Kubitschek, *Die erste Auflage von Vaillants Numismata Imp. Rom. praestantiora* in the new monthly *Numismatik*, no. 1.

quadriga, which St. Urbain did not recognize. This, like the copying of S C, shows the ignorance of the engraver. A specimen in silver in Vienna (F. 2465).

11. O. M. COMMODVS ANTONINVS AVG Bust
laur. r. in cuirass.
R. TR P VII IMP IIII COS III PP below LIBERAL
V Distribution scene.
Inv. no. 1073. C. 313. M.S. iii, no. 37. A.
[Pl. XIX. 11.]

The genuine piece is only known in gold. On the other hand, the denarius in Vienna (F. 2698) is from St. Urbain's dies. What coin he copied is unknown, as the Vienna aureus only came from the Weber Sale. What we have said under no. 9 applies to this piece also. Only the gold piece is mentioned in the 1682 edition of Vaillant, while in Baldini's edition of 1743 we read "hic nummus ex auro et argento". Mezzabarba (1730), p. 246, mentions a denarius with TR P VIII from the Arscot collection, but I have not been able to consult the edition quoted by him, which apparently includes silver coins also. In any case it is another forgery.

12. O. IMP CAES P HELV PERTIN AVG Bust
laur. r.
R. OPI DIVIN TR P COS II Ops seated l.
Inv. no. 1074. C. 32/33. A, R. [Pl. XIX. 12.]

This piece, which is perhaps the most successful of the whole series, copies closely Vienna no. 13938. A specimen in gold in Vienna (F. 2757), wt. 7.57 gms. (D.)

13. O. Same obverse die as 12.
R. AEQVITAVGTRPCOSII Aequitas standing l.
Inv. no. 1074. C. 1/2. A, R. [Pl. XIX. 13.]

Original unknown. The Vienna aureus came from Tiepolo. No strike known.

14. O. IMP CAES M DID SEVER IVLIAN AVG

Bust laur. r.

R. RECTOR ORBIS Emperor standing l. with globe.

Inv. no. 1075. C. 1, 11 (*obv.*), C. 14, 18 (*rev.*). *N*, *AR*.
[Pl. XIX. 14.]

Here is, as often, a combination of different obverse and reverse types. The emperor further rests his left hand on the upper part of the thigh, a pose resulting from a misunderstanding of the roll which on genuine examples he holds in his left hand. Vaillant indeed reproduced a piece in both editions which has the long legend on the obverse, but the text shows that the illustration is incorrect; for the pieces mentioned by Vaillant came from Paris (the Verneuil collection also, from which the silver comes, passed into the royal cabinet in the reign of Louis XIV), and are, therefore, identical with those in Cohen, which have the short legend. There are two specimens from the St. Florian collection in gold, one of which I procured for Vienna. Vienna (F. 4409), wt. 6.79 grm. (D) and St. Florian 7.34 grm. (D). The Vienna piece is of lighter gold.

15. O. IMP CAES C PESC NIGER IVS COS II Head laureate r.

R. FORTVNAE REDVCI Fortune standing l. with rudder and cornucopiae.

Inv. no. 1076. [Pl. XX. 1.]

Intended to be a large brass: it is significant that the S C is omitted, as it must have been on the model, an aureus or denarius.¹¹ There is a specimen in Vienna (F. 2822) with an artificial but not successful green patina. Mezzabarba also knew a large brass of Pescennius, at a date earlier than our forger.

¹¹ Perhaps C. 26 note is a similar piece; but it has REDVC in Lavy 1811. C. 26 is, however, not in Vienna.

16. O. M OPEL DIADVMENIANVS CAES Head laur., draped, r. Die has disappeared.

R. PRINC IVVENTVTIS Diadumenian standing

l. with staff and sceptre: behind, two standards.

Inv. no. 1083. C. 12. R. [Pl. XIX. 15.]

A specimen in Vienna (F. 2988), wt. 7.43 grms. A (D), is quoted as late as in the *Cimelium Catalogue* as genuine (XIV), but Eckhel, in *Cat. Mus. Caes.* 310, describes it as "suspectus". It does not appear in the *Synopsis*. There is apparently no aureus of this type, but only denarii. A second specimen in Vienna with the same obverse die has reverse PRINCIPI IVVENTVTIS, Emperor standing l. with transverse standard and spear reversed: (a rev. of Philip II, *q.v.*) (Vienna F 2989) R (D), probably suggested by the Vienna gold quinarius 15927 = C. 16.

17. O. IMP MAXIMINVS PIVS AVG Bust laur., draped, r.

R. SALVS AVGVSTI Salus seated l.

Inv. no. 1077. C. 84/85. A, R. [Pl. XX. 2.]

The original might be the Vienna denarius no. 17122; but the engraver apparently did not understand that the snake is entwined round the altar: no strike known.

18. O. MAXIMVS CAES GERM Bust laur., draped, r.

R. PIETAS AVG S C Sacrificial vessels.

Inv. no. 1078, cf. C. 3. [Pl. XX. 3.]

The E in GERM is faultily engraved. Here, as in no. 10, the engraver has in his ignorance of Roman coins copied the S C of his model, which may be taken to have been the reverse of the large brass (C. 5) although on the silver the simpulum is clear. A specimen in Vienna (F. 3100), R (D). Kell, p. 152, knows this piece from the Ariosti collection, which later came into the Vienna cabinet. Eckhel, *Doct. Num.* vii, 298, already

regarded it as a forgery; Arneth does not mention it. It is interesting to find Eckhel (1, 1) saying that S C is also found on the gold of Diocletian; this is the mint-mark of Cyzicus (Pink, *Num. Zeitschr.*, 1931, p. 13, 38 ff.).

19. R. PRINC IVVENTVTIS: Emperor standing l., sceptre and oblique lance: behind, two standards.
Inv. no. 2083. Maximus C. 10. AR. [Pl. XX. 4.]

The obverse might have been the same as 18, but there is perhaps an aureus of Philip II with this (see no. 25, note). No specimen is known of Maximus.

20. O. IMP C M CLOD PVPIENVS AVG Bust
laur., draped, r.
R. VOTIS DECENNALIBVS in wreath.
Inv. no. 1080. C. 42/43 (without obverse). A, AR.
[Pl. XX. 5.]

A specimen in Vienna (F. 4310), wt. 7.58 gms. A (D.), a second (F. 4315) AR from the Voetter collection. The gold piece is described as genuine in the *Cimelium Catalogue*, Pl. III, 21, and in *Cat. Mus. Caes.* 335. In the *Doct. Num.* the pieces of Papienus are unfortunately not given. The *Synopsis* describes it as "suspectus". Elmer was, however, the first to place it among the forgeries, along with Voetter's specimen, which the latter considered genuine. It is really quite doubtful if there is a genuine specimen at all in precious metal. Cohen (42) quotes Vaillant and Welzl for the gold; Vaillant has it in silver only, and Welzl has no specimen at all. Balbinus (31) is also silver. The references for silver are no more reliable. It is more likely that our forger copied an older forgery as otherwise he would probably have included the S C from the bronze.

21. *O. SABINIA TRANQVILLINA AVG* Bust r.
R. CONCORDIA AVGG Concordia seated l.
 Inv. no. 1079, cf. C. 1. *Æ*. [Pl. XX. 6.]

A specimen in Vienna (F. 3205), *Æ*. It is apparently made from a model in poor condition. Cohen does not know of denarii of Tranquillina nor do his sources mention the omission of the crescent. In the old Vienna inventories which only refer to genuine pieces our denarius does not appear. It was, therefore, regarded as false from the first.¹²

22. *O. IMP M IVL PHILIPPVS AVG* Bust laur.,
 draped, r.
R. LIBERALITAS AVGG II Liberalitas standing l.
 Inv. no. 2081, cf. C. 86/87. *Æ*, *Δ*. [Pl. XX. 7.]

Cohen merely says "buste lauré". The model was a badly preserved piece. This shows how the engraver, who had no knowledge of Roman coins, misunderstood the fullness of the robe below the cornucopiae of Liberalitas and made an outstretched hand with a kind of patera out of it, like the sacrificing Pietas, so that the cornucopiae is in the air. No strike known.

23. *O. M OTACIL SEVERA AVG* Bust r.
 The reverse die was probably no. 21.
 Inv. no. 1082, C. 2/3. *Æ*, *Æ*. [Pl. XX. 8.]

The model for the obverse was perhaps Vienna no.

¹² In this connexion an interesting fact may be mentioned. In Vienna there are three second brasses (dupondii) of Tranquillina with *CONCORDIA AVGVSTORVM* (C. 6), which are first mentioned in the *Synopsis* (Eckhel, *Doctrina Num.* VII, 318 has in error *CONCORDIA AVGG*). One specimen was later exchanged for a fine coin from Bachofen. According to Elmer, all three Vienna pieces are from the same die and false. The same is true of Weber Sale, Pl. XXXII, 2144, 2145, and of the coin (? the same as 2145) in Riechmann, *Lager-Kat.*, May 1921, xvii, 1734. Is there a genuine original, and, if so, where?

18084, *A*. In the inventory that of the Volusian is wrongly given as the reverse (no. 26). No strike known.

24. *O. M IVL PHILIPPVS CAES* Bust laur., draped, *r*.
R. PRINCIPI IVVENTVTIS Emperor standing l.
 with transverse standard and reversed lance.
 Inv. no. 1085. C. 60. (This 'unique coin' is also
 the work of St. Urbain.)¹³ *A*. [Pl. XX. 9.]

A specimen in St. Florian, wt. 4.55 grm. *A* (D.).¹⁴

25. *O. IMP C M Q TRAIANVS DECIVS AVG* Bust
 laur., draped, *r*.
R. GENIVS EXERC ILLVRICIANI Genius stand-
 ing l.
 Inv. no. 1084 (obv.), 1086 (rev.). C. 48. *A*. [Pl.
 XX. 10.]

A specimen in St. Florian, 4.45 grm. *A* (D.), which is mentioned as early as Vaillant (Baldini) in the Roman edition, p. 323, as in the Apostolo Zeno collection. In engraving the face the tool has slipped, so that there is a scar across it, which can be seen on all specimens.

26. *O. IMP CAE C VIB VOLVSIANO AVG* Bust
 laur., draped, *r*.
R. AETERNITAS AVGG Aeternitas standing l.
 Inv. no. 1085 (obv.) and 1082 (rev.). C. 10. *A*. [Pl.
 XX. 11.]

No strike known. Cohen quotes Mionnet, who remarks on this aureus (p. 17): "Il y a un coin moderne." Whether the reference is to our die, we do not know.

¹³ Cohen, 66, quotes a suspicious piece from Khell, 66, the reverse of which seems to be made from no. 19, and which therefore is a hybrid. It was in de France and might, therefore, with no. 9, have been in the Hunter collection. Sir G. Macdonald informs me that neither piece is now there, and suggests that Hunter may himself have discarded them as forgeries.

¹⁴ M. J. Babelon has kindly sent me a cast of another specimen from the same dies. There was another in Sotheby's *Sale Catalogue*, 1921, July 6-7, Pl. IV, 90.

It is clearly evident from the engraver's work that we are dealing with a man who was little acquainted with ancient coins. Errors are frequent, especially in the first pieces, e.g. 1, the number VII written as **IVI**; 2, **N** for **A**, **PON MX** for **PONT MAX**; 3, **PIATORINVS** for **PLATORINVS**; 6, **POT F** for **POT II**; 18, the defective **E**. The details are often clumsily executed, e.g. 4, strikingly small head; 8, the final **O** of **CONSECRATIO** engraved on the wing; 7, the figure of Vesta inclines forward very much; 10, a quite impossible pyre; 14, the misunderstood roll; 17, the badly drawn snake; 22, the fold of the garment transformed into a hand. The wrong use of **S C** also shows it, e.g. no. 10 and no. 18 retain **S C** from the original model, which was a large brass, while it is wanting on the large brass no. 15, which was copied from a denarius. It is evident also that whenever the engraver had a poor model, whether badly preserved or itself a forgery, the forgery is clumsy. But where he had an opportunity to copy accurately, he displayed the skill of a good medallist. The first six pieces seem to be unsuccessful attempts, as they have mistakes or, like 4 and 5, are not finished. It is also of them that the fewest specimens are so far known.

The flan seems to have been sometimes prepared from a piece of metal as in the Didius Julianus, the Vienna specimen of which is of remarkably light gold, sometimes by using an old coin as in the gold Pupienus, where **OMA** can still be read clearly on the reverse.¹⁵

A further feature of technical interest is the frequent double-striking. It is difficult to decide whether we

¹⁵ The original aureus was, as Elmer observes, an earlier, first-century piece. The high weight, 7.58 grm., agrees with this.

have here a defect in the striking or whether the object was to give the coin the appearance of being ancient.

That the forger's intentions were dishonest seems to me clear. Either he chose rare originals to copy (the valuations in Cohen are not always as high as they should be), or he made rarities by striking in an unusual metal, e.g. nos. 11 and 16, or by combining different dies, e.g. 14 and 16, and perhaps also 9 and 13 *R*. Whether he invented new pieces or only copied already existing forgeries is difficult to say. Of 20 I could believe in an old forgery as model, while 10, 15, and 18 are to be put down as inventions of the forger.

The question now remains when and where did St. Urbain make these forgeries. Here again they must speak for themselves as the archives are silent. As I have pointed out under 9 and 11 and especially 25, pieces by St. Urbain appear for the first time in Baldini (Roman ed. of Vaillant, of 1743), while they are wanting in the earlier editions. For Vienna they are first found in the Cimetium Catalogue which was published in 1755. Eckhel turned out some in the *Cat. Mus. Caes.* and another later in the *Doctrina*, and Arneth the remainder. In the Apostolo Zeno collection also there were specimens. Five such went to the St. Florian collection (8, 14, 24 (2) and 25); another he had previously given away (no. 9). As Zeno was very friendly with Baldini¹⁶ it is clear that it is his pieces which appear in the Roman edition of Vaillant. Zeno (Negri, 248) himself had a good knowledge of forgeries. He began his collection in 1722

¹⁶ F. Negri, *La Vita di Apostolo Zeno*, 1816, Vienna, pp. 240, 324; Kubitschek in *Anzeig. d. Ak. d. Wiss.*, 1929, p. 27.

while in Vienna and was in constant intercourse with dealers and collectors of all countries (Negri, 323). There is further at least one piece in the Ariosti collection, no. 19. Ariosti died in Vienna in 1766. His daughter Countess Caroline v. Ariosti presented the collection to the Emperor Joseph II on March 7, 1781, but later she was paid for it. I also think there were two pieces in the de France collection. De France was "General Director der Schatzkammern und Galerien" and died in Vienna on February 26, 1761, the same year as St. Urbain. His coins were sold to Hunter, and I had thought they might still be in Glasgow (see p. 215, note 3); where Voetter got his specimen (no. 20) it is no longer possible to ascertain.

All the collections which contain these forgeries point to Vienna as their place of origin. This confirms the fact, which it was natural to assume, that the forgeries were made in Vienna, especially when we add my discovery that at least some of them are based on models in Vienna. St. Urbain came to Vienna in 1737; Baldini knew the forgeries by 1743, so that some of them belong to this period; perhaps some are earlier.

The forger's object is evident from what has been said. If we remember that he had in his youth already been imprisoned for forgery and that he was described as "*trop ami de ses plaisirs*", my view is justified and the reason clear. Unfortunately, it is no longer possible to ascertain whether his fraud became known and when and how his dies came into our collection. It is a remarkable fact that some of his pieces were in our collection as genuine, so that the conclusion might be drawn that the dies only came into the collection much later, probably in the time of Steinbüchel. Neverthe-

less, not even Arneth, who suspected the last piece, the Pupienus, mentions who made them. It had, apparently, escaped his memory.

It would be very interesting to learn whether there are similar pieces in other collections. I have looked over a number of recent sale catalogues, but found nothing.

The pieces illustrated on plates XIX and XX are mostly lead impressions from the die.

K. PINK.

MISCELLANEA.

THE WROXALL THEODOSIAN HOARD.

IN the *Num. Chron.* for 1863 (N.S. III), p. 268, a letter from Mr. W. Airy is printed recording a find of a hoard of about 5,000 late Roman coins at Wroxall, Isle of Wight. The circumstances of the finding are there set forth and may be found at greater length in the *Gentleman's Magazine* (1864, i. 88).

Fewer than 500 of these coins are now preserved in the Museum at Carisbrooke Castle. In view of the fact that they had never been properly cleaned and also of the present greater appreciation of these issues it seemed desirable to examine them afresh. I am much indebted to Miss C. Morey, Hon. Curator of the Museum, for granting permission to do this, and to Mr. G. A. Sherwin, F.S.A., who had made a preliminary classification of the coins.

The better contemporary account (*Gent. Mag., op. cit.*) describes all the coins then available, the rest having already been dispersed. It seems likely that the collection about to be described is this "residue", as it was termed, bereft of nearly all its earlier coins and many, also, of the larger fourth-century issues. Those which remain are almost all of 4 Æ size¹ and in a very poor condition,² representing the dregs of the largest recorded hoard of its kind. For it is plainly of the class of late fourth-century bronze hoards, predominantly Theodosian, of which the Weymouth Bay find is the best example so far investigated.

The coins may be summarized³ thus:—

Tetricus I	1
Constantine I	1
Urbs Roma	1
Constantius II or Constans	1

¹ Even the Tetricus coin is worn, and perhaps partly clipped, to this size.

² No coin is completely legible.

³ A full account will be published shortly in the *Proceedings of the Isle of Wight N. H. and A. Society.*

House of Constantine	3
Valentinian I	2
House of Valentinian I	3
" " or Constantine I	10
Magnus Maximus or Victor	1
Valentinian II	3
Theodosius I	7
Arcadius	13
Honorius	7
? Honorius	1
House of Theodosius I Victoria Auggg (2 Vics)	1
" " " " (1 Vic)	65
" " Salus Reipublicae	21
? " " Votive reverses	2
" " (almost certainly)	60
Illegible but fourth cent. (the majority prob-	
ably House of Theodosius I)	110
Fragments of about	150
	Total <u>463</u>

The details of the issues of A.D. 388-395 where legible are as follows:—

Valentinian II Victoria Auggg PCON (1) + 2.

Theodosius I Victoria Auggg 2.

Reverse illegible 3 + 1 overstruck.

Arcadius Victoria Auggg TR (1) + 4.

Reverse illegible 8.

Honorius Salus Reipublicae 1 (? Aquileia type).⁴

Victoria Auggg //ON (1) + 3.

Reverse illegible 2.

House of Theodosius Salus Reipublicae AQP (1),

AQS (1) + 19.

⁴ v. Richborough III (1932), p. 193.

Victoria Auggg $\overline{\text{PCON}}$ (1), $\overline{\text{SCON}}$ (1),
 $\overline{\text{TCON}}$ (1), $\overline{\text{CON}}$ (3).
 $\overline{\text{LVGP}}$ (2), $\overline{\text{LVGS}}$ (1), $\overline{\text{LVG}}$ (2).
 $\overline{\text{TR}}$ (2) + 52.

Clearly no arguments can be adduced from these meagre figures to support the conclusions arrived at from other such finds. It can, however, be said that nothing here runs counter to prevailing ideas on the subject.

There are two overstruck coins:—

1. A diademed head of Valentinian type overstruck on indeterminate obverse, perhaps Constantinian; reverse illegible.
2. D N THEO [.....] small bust, diademed, draped r. overstruck on obverse P. F AVG with larger diademed head of Constantinian or Valentinian type; reverse indeterminate but *perhaps* of Valentinian type.

Overstruck coins of the Theodosian period are uncommon (v. *Num. Chron.*, 1930, p. 280). This instance, however, may merely indicate the re-use of an old worn coin in preference to a new plain flan. The re-striking has been carelessly done, since it occurs only on one-quarter of the coin with the lettering *little worn*; the other three-quarters of the flan remains in its original state and is *very worn*.

The only other coins calling for comment are (a) two pieces of larger coins (illegible) shaved down to small 4 Æ size with slanting cuts, and (b) a 4 Æ flan (illegible) 2 mm. in thickness.

B. H. ST. J. O'NEIL.

THE SELSEY HOARD.

This hoard of close on 1,000 Roman silver coins was found in a garden at Selsey, Sussex, on the 16th of November, 1932. Broken pieces of the earthenware pot that had contained the coins were found with them.

The coins were distributed over reigns as follows:—

Denarii.

ELAGABALUS	4
JULIA PAULA	1
SEVERUS ALEXANDER	3
JULIA MAMAEA	1
	<hr/> 9

Antoniniani.

GORDIAN III	22
PHILIP I	23
PHILIP II	6
OTACILIA SEVERA	4
TRAJAN DECIUS	8
TRAJAN DECIUS (TRAJAN restored)	1
HERENNIUS ETRUSCUS	6
HERENNIA ETRUSCILLA	5
TREBONIANUS GALLUS	24
VOLUSIAN	17
AEMILIAN	3
VALERIAN I	41
GALLIENUS	91
VALERIAN II	16
SALONINUS	16
SALONINA	47
QUIETUS	1
POSTUMUS	513
MARIUS	1
LAELIAN	1
VICTORINUS	110
CLAUDIUS II	8
QUINTILLUS	2

Total

966

DESCRIPTION OF THE FIND.

<i>Reign</i>	<i>No.</i>	<i>Reference</i> ¹
ELAGABALUS	4	C. 86 (1), 120 (1), 136 (1), 196 (1).
JULIA PAULA	1	C. 6 (1).
SEVERUS ALEXANDER	3	C. 108 (1—Antioch), 133 (1), 388 (1).
JULIA MAMAEA	1	C. 35 (1).
GORDIAN III	22	C. 39 (2), 92 (1), 121 (5), 155 (1), 160 (1), 167 (1), 173 var. (1—rev. AVGVSTI), 196 (1), 203 (1), 250 (1), 261 (3), 312 (1), 357 (1), 404 (2).
PHILIP I	23	C. 3 (1). 9 var. (4—rev. AVGG.), 12 var. (1—rev. AVGG.), 25 (1), 50 (1), 55 (1), 109 var. (1—obv. IMP · PHILIPPVS AVG.), 113 (1—Viminacium), 118 (1), 120 (1), 170 (2), 173 (1), 193 (1), 215 (3), 221 (1—Viminacium), 223 (1), 241 (1).
PHILIP II	6	C. 6 (1), 54 (1), 57 (2), 57 var. (1—rev. no captive), 59 (1).
OTACILIA SEVERA	4	C. 4 (3), 17 (1).
TRAJAN DECIUS	8	C. 2 (1), 4 (2), 6 (1), 16 (1), 49 (1), 111 (2).
TRAJAN DECIUS (restoration of TRAJAN)	1	C. (Trajan) 664 (1).

¹ References are to Cohen, *Description historique des monnaies frappées sous l'Empire romain*, 2nd edition (C.). The mint is Rome, unless otherwise noted.

- [HERENNIA ETRUSCILLA 5 C. 17 (2), 19 (3).]
- HERENNIUS ETRUSCUS 6 C. 6 (1), 8 (1), 11 (2), 26 (2).
- TREBONIANUS GALLUS 24 C. 13 (2), 17 (1), 20 (2), 37 (2), 41 (3), 47 (1—Antioch), 63 (2), 67 (1), 76 (1), 84 (4), 88 (3), 117 (1), 128 (1).
- VOLUSIAN 17 C. 8 (3), 20 (1), 25 (2), 32 (2), 44 var. (1—rev. Juno holds corn-ears, not pat-era), 70 (2), 85 (1), 88 (1), 94 (2), 125 (1—Antioch), 133 (1).
- AEMILIAN 3 C. 2 (1), 26 (1), 53 (1).
- VALERIAN I 41 C. 25 (1), 36 (1—Milan), 53 (2), 71 (1—Milan), 72 (2), 74 (1—Milan), 83 (1), 113 (1), 119 (1), 141 (1—Lugdunum), 142 (1), 183 (2), 189 (1—Antioch), 197 (1), 200 var. (1—rev. AVGG.), 224 (3), 230 (4), 266 (1—Milan), 271 (2—Milan), and the following coins, erroneously attributed by Cohen to VALERIAN II: C. (Valerian II) 1 (1), 5 (5), 6 (5), 15 (2).
- GALLIENUS 91 C. 5 (1), 89 (1—Milan), 131 (1), 149 (2—Lugdunum), 186 (2—Milan), 195 (1), 261 (1), 308 (1—Lugdunum), 310 (3—Lugdunum), 314 (1), 351 (4), 382 (1), 398 (1), 437 (1), 453 (1—Milan), 468 (1—Milan), 540 (1—Milan), 730 (1—Milan), 754 (1), 831 (2—Lugdunum), 888 (2), 936 (3—Milan), 944 (1—Milan), 956 (1—Milan), 1008 (1), 1047 (4—

Lugdunum), 1048 (13—
Lugdunum), 1055 (1—
Lugdunum), 1062 (2—
Lugdunum), 1098 (1—
Antioch), 1109 (1—An-
tioch), 1198 (1—Lugdu-
num), 1206 (6—Lugdu-
num), 1284 (1), 1284 var.
(1—rev. spear in l. hand),
1288 var. (2—rev. spear
in l. hand), 1289 var. (1—
rev. spear in l. hand—
Milan), 1309 (4 Lugdu-
num).

SALONINA

- 47 C. 36 (6—Lugdunum), 39
(1), 50 (7—Lugdunum),
67 (3), 78 (1), 84 (1), 94
(1), 112 (1), 115 (18—
Lugdunum), 121 (1), 129
(1), 134 (1—Lugdunum),
137 (1), 142 (2), 143 (1),
and one coin not in Cohen:

Obv. SALONINA AVG,
bust, diademed, draped,
r., on crescent.

Rev. PVDICITIA
AVGG, Pudicitia
standing l., raising l.
hand and holding trans-
verse sceptre (style a
little odd: ? Rome).

VALERIAN II

- 16 Under C. Saloninus in Cohen:
C. (Saloninus) 5 (5—Lug-
dunum), 26 (11—Lug-
dunum).

SALONINUS

- 16 C. 41 (10—Lugdunum), 61
(1—Lugdunum), 87 (2—
Lugdunum), 93 (3—Lug-
dunum).

QUIETUS

- 1 C. 6 (1).

POSTUMUS ²	513	C. 32 (1), 33 (3), 39 (46), 67 (13), 80 (3), 91 (27), 98 (3), 101 (38), 144 (2), 153 (2), 155 (1), 159 (10), 161 (1), 167 (2), 192 (1), 195 (7), 199 (104), 206 (5), 213 (5), 215 (20), 220 (15), 230 (2), 243 (38), 273 (14), 295 (40), 313 (1), 331 (36), 333 (2), 336 (9), 350 (3), 360 (7), 361 (1), 365 (5), 366 (4), 377 (19), 377 var. (1—obv. IMP·C·M·CASS·LAT·POSTVMVSP·F·AVG) 419 (21), 452 (1).
MARIUS ²	1	C. 13 (1).
LAELIAN ²	1	C. 4 (1).
VICTORINUS ²	110	C. 8 (2), 49 (24), 79 (47), 83 (2), 90 (19), 101 (4), 112 (11), 131 (1).
CLAUDIUS II	8	C. 7 (1), 21 (1), 43 (1), 74 (1), 92 (1), 99 (1), 216 (1), 302 (1).
QUINTILLUS	2	C. 5 (1), 59 (1).

The latest coins in this hoard are the two of Quintillus, whose reign is usually assigned to *circa* April-May, 270. As, however, the West was still under its own Gallic emperors, we must allow several months more at least for coins of the Roman mint to drift across to Britain; we thus reach the later months of 270 or even the early months of 271 and are bound to ask with some anxiety why we find no coins of Tetricus I, whose accession is still usually placed in 270, and formerly was placed even earlier. The simplest, and probably the correct, solution is to accept the later date for Tetricus I and to let his reign begin early in 271. It is unlikely that there should be any cause that

² The coins of the Gallic emperors are all of mints in Gaul, and with very few exceptions, of Lugdunum. In view of still existing uncertainties as to mint, no separation has been attempted here.

would keep coins of Tetricus I, if already struck at the date of deposit, from inclusion in the hoard. And, again, we have no serious evidence for a second possibility—that, after the death of Victorinus, the West may have begun to adhere to Claudius II and Quintillus, before Tetricus could consolidate his power.

The hoard belongs to a well-defined, but not particularly common, class—Gallic base silver, with Postumus easily predominant, Victorinus present in some quantity, Tetricus I almost or completely absent, with a considerable quantity of Gallienus and a sprinkling of earlier coins and of coins of Claudius II or even Quintillus.³ Our hoard includes only 9 denarii, all earlier than A.D. 238. It may well be that they circulated at the same rate as the later Antoniniani. The general quality of the Antoniniani in this hoard is relatively good. Among the coins of Postumus those with a moderate percentage of silver predominate, and even the later coins of Gallienus, the coins of Victorinus, Claudius II, and Quintillus still present a silver surface and make a brave pretence of belonging to the silver series. As Antoniniani from Gordian III still circulate in some little quantity with these later coins, it is safe to assume that the Antoninianus had not yet crashed—that it still circulated at a rate not lower than the metal value of the best of the Antoniniani contained in the hoard. The meaning of such hoards as this, contrasted with the far commoner hoards of masses of Victorinus, Tetricus I and II, and Gallienus of the poorest quality, should repay a careful study. But the study would have to be of wider range than is possible at the moment here.

H. M.

³ Cp. *Num. Chron.*, 1846–7, p. 130, Caudebec-les-Elbœuf, 8100 (6800 Postumus, c. 650 Gallienus, &c., Victorinus, no Tetricus), *Num. Chron.*, 1871, pp. 169 ff. Lutterworth 1754 (Postumus 37, Victorinus 126, Tetricus I and II 8, Gallienus, &c., 38, Claudius II 33, Quintillus 7), *Rev. Num.*, 1905, pp. 233 ff. Combours (Postumus 812, Victorinus 243, Marius 20, Tetricus I and II 3, Gallienus, &c., 8, Claudius II 6, Quintillus 1). For other hoards of similar date, cp. also *Num. Chron.*, 1863, pp. 112 ff.; 1887, pp. 312 ff.; *Rev. Num.*, 1913, p. 414; *Aréthuse*, 1931, pp. 24, 25.

POOLE HOARD OF ROMAN COINS.

A hoard of Roman billon of the third century A.D. was found in the autumn of 1930 at Poole in Dorset. The coins were distributed over reigns as follows:

GORDIAN III	1
TRAJAN DECIUS (DIVUS AUGUSTUS)	1
VOLUSIAN	1
VALERIAN I	12
GALLIENUS I	215
SALONINA	30
VALERIAN II	6
SALONINUS	2
POSTUMUS	96
VICTORINUS	249
TETRICUS I	160
TETRICUS II	60
CLAUDIUS II	121
QUINTILLUS	10
AURELIAN	1
	<hr/> 965

All were Antoniniani, except a single *As* of Postumus.

A summary of the hoard follows:

GORDIAN III. 1. C. 178¹ (var. *obv.* IMP·CAES·M·ANT·GORDIANVS AVG· base metal).

TRAJAN DECIUS (?). 1. DIVVS AVGVSTVS. C. (Augustus) 578.

VOLUSIAN. 1. C. 25.

VALERIAN I. 12. C. 18, 53, 72 (2), 140, 152 (Antioch), 183, 221, 224 (2), 230 (2).

GALLIENUS 215. C. 2 (4), 24 (4-3 Siscia), 38 (4), 72 (4), 73 (5), 76 (3), 98 (Milan), 109 (Milan), 153 (2), 154 (3), 156 (2), 157 (13), 158 (12), 161 (3), 165 (6), 169 (Milan), 181 (Siscia), 183, 192 (2 Milan), 198, 246 (3) 261, (Milan), 269 (2), 269 (var. *obv.* not draped, 11), 279

¹ References are to Cohen: *Description historique des monnaies frappées sous l'Empire romain*, 2nd edition, 1886 ff. The coins are of the mint of Rome, except as otherwise noted.

(Milan), 308 (2 Lugdunum), 317, 326 (2), 327, 341, 342 (3), 344, 345, 351, 382, 388 (2), 389, 403, 432 (2 Milan), 440, 481 (Milan), 529 (Milan), 533 (var. *rev.* V•P•V•F• Milan), 586 (6), 617 (8), 617 (var. *rev.* no shield), 667 (6), 670, 690 (3), 694, 699 (4), 719, 727 (3-2 Siscia), 766 (var. *obv.* not draped, *rev.* Pax standing), 773, 786 (2 Milan), 818 (Milan), 854 (4 Siscia), 859 (Milan), 862 (2), 864 (3-2 Milan, 1 Siscia), 880, 888 (var. *rev.* no globe, 2). 928 (Milan), 932, 934 (Siscia), 961 (var. *obv.* drapery on l. shoulder), 979 (6), 1008 (11), 1027 (var. *obv.* not draped), 1060 (2 Lugdunum), 1062 (2 Lugdunum), 1071 (4), 1118 (2 Milan), 1118 (var. *obv.* drapery on l. shoulder, Milan), 1119, 1162 (Lugdunum), 1220 (but in billon, 2 Milan), 1223, 1236 (3 Milan), 1237 (Milan), 1288, 1309 (Lugdunum), 1339 (Milan). Uncertain (3, one half-barbarous).

SALONINA. 30. C. 17 (2 Milan), 39 (5), 50 (2), 51 (Milan), 56, 60 (4), 68 (2), 70, 77, 84 (2), 94 (5), 117 (Milan), 121, 129, and one not in Cohen: *obv.* SALONINA AVG• Bust diademed, draped, r.; *rev.* MARTI P[ACIFERO], Mars standing l., holding branch and spear.

VALERIAN II. 6. C. 2 (Lugdunum), 5 (2), 36 (2), 70 (under Saloninus in C.).

SALONINUS. 2. C. 41 (Lugdunum), 61 (Lugdunum).

POSTUMUS. 96. C. 19 (2 Milan), 31 (4 Cologne), 33 (2 Lugdunum), 39 (5, 3 Lugdunum, 2 Cologne), 57 (Milan), 60 (Milan), 67 (3 Lugdunum), 80 (2 Lugdunum, 1 doubtful), 91 (4 Lugdunum), 144 (Cologne), 159 (7, 4 Lugdunum, 3 Cologne), 161 (Cologne), 167 (Lugdunum), 199 (10, 9 Lugdunum, 1 Cologne), 213 (4 Cologne), 214 (Cologne), 227 (16, 3 Lugdunum, 13 Cologne), 230 (Lugdunum), 243 (4 Lugdunum), 273 (Lugdunum), 295 (4 Lugdunum), 331 (5, 4 Lugdunum, 1 Cologne), 336 (Lugdunum), 352, 355 (2 Lugdunum), 362 (2 Lugdunum), 377 (6 Lugdunum), 441 (3 Milan), and one *As.* C. 381 (?).

VICTORINUS.² 249. C. 8, 35 (Cologne), 36 (4 Cologne), 49 (53), 74 (var. *obv.* IMP•C•VICTORINVS P•F• AVG•), 79 (40), 79 (var. *rev.* no V or star), 83 (6 Cologne),

² All of Lugdunum, where not otherwise indicated.

90 (16, 1 half-barbarous), 101 (28), 112 (34), 118 (34), 126 (3), 131 (27).

TETRICUS I.³ 160. C. 17 (15), 37 (18), 42, 54 (19), 55 (4), 71 (7), 72, 75 (13), 95 (29), 101, 131 (var. *obv.* IMP·C·TETRICVS P·F·AVG·), 134, 153 (10), 154 (4), 170 (14), 185 (8), 207 (8), 207 (var. *obv.* IMP·TETRICVS P·F·AVG·). Barbarous (3, 1 of the *rev.* Salus). Doubtful 1. Overstrike (*rev.* LAETITIA AVG·N· 1).

TETRICUS II.³ 60. C. 5 (2), 34, 48 (5), 48 (var. *rev.* PIETAS AVG·), 59 (2), 60 (3), 64, 88 (26), 97 (18). Barbarous (1, *rev.* Pietas).

CLAUDIUS II. 121. C. 6, 7 (2), 10 (3), 21 (7), 22 (3), 25 (3), 43 (2), 50, 77 (3 Milan), 79 (6), 80 (4), 84 (5), 88 (Milan), 92 (2, 1 Siscia), 109, 109 (var. *obv.* draped), 110 (3), 114 (4), 115 (5), 124 (2), 130 (4), 131 (2), 138 (3, 2 Siscia), 144, 152 (2), 153, 160 (5), 197 (2), 198, 204 (2), 214 (2), 216 (4), 220, 230, 232 (4, *obv.* reads [IMP·] CLAVDIVS AVG·), 265, 268 (3), 276 (3 Siscia), 281 (3), 284 (3), 286 (Siscia), 293 (7), 313 (6, 1 Siscia).

QUINTILLUS. 10. C. 2, 17, 32 (3), 47 (Milan) 52 (2), 57, 63.

AURELIAN. 1. C. 95 (Milan).

The hoard is one of a well-known class—hoards put away by their owners in consequence of the demonetization of the old bad coinage by Aurelian at his reform in A.D. 273. The presence of a single 'reform' coin of Aurelian does not invalidate this statement, for a few such stragglers are commonly present in such hoards. The date of the burial will be c. A.D. 273-4, the date of the coin of Aurelian in question—or possibly later, as it is not certain that owners of the demonetized coinage always put away their accumulations immediately. As is usual, a few coins of better silver, struck before the great debasement of c. A.D. 258 to 259, are included. The Gallic coins preponderate, as is natural in a British hoard, but there is more of a balance between them and the Imperial coins than is customary. If as numismatists have of late supposed, Tetricus I only began to reign about the time of the death of Claudius II in A.D. 270, the absence of any Roman coins, except 10 of Quintillus and 1 of Aurelian, to correspond to the 220 of Tetricus and his son, is rather remarkable. It might look as if Tetricus I must

³ All of Lugdunum. *Obv.* uncertain.

have been striking coins well before the death of Claudius. Goyau (*Chronologie de l'Empire romain*), p. 320, places the accession of Tetricus early in A.D. 268, and even if his dating is found to crowd in too much on the reign of Victorinus, it is possible that we shall return in that direction. But the evidence of the Selsey Hoard (pp. 231 ff.) seems to point in the opposite direction. The presence in the hoard of a solitary *As* of Postumus is of interest, but probably of no special importance. H. M.

VEJOVIS AND DIVUS AUGUSTUS.

Consecration—the enrolling of dead Emperors in the ranks of the gods—necessarily involved the adaptation of old forms of divine worship to the new recipients, once men, now gods—the “divi”. The general manner in which this adaptation was carried out is fairly clear, but a closer study, based on the material that the coins so richly supply, would certainly prove interesting and valuable. For the moment one curious detail is all I have to offer.

In the cult of Divus Augustus as revealed by his coins, beside the radiate crown of the sun-god and the star that is readily associated with it, we find the thunderbolt too.¹ Lucan,² again, in his famous sneer at “consecratio”, writes:

bella pares superis facient civilia divos
fulminibus manes radiisque ornabit et astris
inque deum templis iurabit Roma per umbras.

What is the thunderbolt doing beside the solar attributes? Have we simply a contamination of two worships—those of Jupiter and Apollo-Sol?

A simpler and more attractive explanation is possible. Vejovis, a sort of opposite of Jupiter, was an important god

¹ Cp. *B.M.C. Emp.* I, p. 141, nos. 151 ff., C. 244, *As* of Divus Augustus, struck by Tiberius, with *obv.* DIVVS AVGVSTVS PATER, Head of Divus Augustus, radiate l.: in front, thunderbolt, behind, star: Mattingly and Sydenham, *Roman Imperial Coinage*, II, p. 232, no. 130, C. 567, *As* of Divus Augustus struck by Nerva, with *rev.* Winged Thunderbolt. Cp. the eagle on thunderbolt on *Asses* of Divus Augustus, restored by Titus, *B.M.C. Emp.* II, p. 284, no. 278, C. 554.

² *Pharsalia* VII, vv. 457-9.

of the Roman State and enjoyed a special worship from the *gens Iulia* at Bovillae.³ His name was interpreted as meaning "little Jupiter", but he was represented as an Apollo, dealing destruction with his arrows.⁴ Here, as on Mount Soracte, Apollo represents a death-god of the same nature as Dis Pater. A young god, who is probably this Apollo-Vejovis, is represented with thunderbolt in his right hand on Roman Republican denarii of C. Licinius L. F. Macer, and L. Caesius.⁴

While still regarded as akin to Jupiter, then, Vejovis was represented rather as an Apollo and naturally combined in his person the attributes of the two gods. When members of the Julian "*gens*" came to be consecrated, it would be natural, in seeking forms of worship, to draw on those of the gentile cult of Bovillae.⁵ In A.D. 16 a "*sacrarium*" was dedicated there to the Julian *gens* and an image to Divus Augustus (Tacitus, *Annals* II. 41).

H. M.

ELLAND TREASURE TROVE.

A hoard of silver coins was found in an earthenware jar on November 7th, 1932, in the garden of a house newly erected in Elizabeth Street, Elland, in the West Riding of Yorkshire. The coins were declared Treasure Trove.

The date of the deposit is approximately that of the outbreak of the Civil War, for the latest coins are 72 shillings and 4 sixpences of Charles I which bear the initial mark Triangle in Circle (1641-3). None of the coins were in fine condition, the majority were poorly preserved.

³ Wissowa, *Religion und Cultus der Römer*, 2nd ed., pp. 236 ff.

⁴ *B.M.C. Rep.* I, p. 320, nos. 2467 ff.; II, p. 290, nos. 585 ff.

⁵ Apollo Actius, it may be noted, the special patron of Augustus, was emphatically Apollo the destroyer: cp. Virgil, *Aeneid* VIII, vv. 704 ff.

Actius haec cernens arcum intendebat Apollo
Desuper: omnis eo terrore Aegyptus, et Indi,
Omnis Arabs, omnes vertebant terga Sabaei.

At the Secular Games of 17 B.C.—games traditionally associated with the cult of Dis Pater and Proserpine—but now devoted rather to Apollo and Diana, Apollo as Vejovis may well represent Dis Pater, whose absence is otherwise not easy to explain.

The following is a description of the coins, which number 1187, making a face value of £57 8s. :—

Edward VI. Sixpence (1551-3).

i.m. Y (1), i.m. Tun (1) 2

Philip and Mary. Shilling with Spanish titles (1554) 5

Elizabeth.

Shilling.

i.m. Lis (3), Crosslet (21), Martlet (19), Bell (5),
 T (11), Escallop (11), Crescent (3), Hand (5), Tun
 (14), Woolpack (13), Key (3), O (1), 1 (2), 2 (4) . 115

Sixpence.

i.m. Pheon 1561 (22), 1562 (7), 1564 (5), 1565 (5),
 uncertain dates (6); Rose 1565 (5); Portcullis (1566)
 (9); uncertain i.m. of 1566 (1); Lion 1566 (1), 1567
 (2); Coronet 1567 (10), 1568 (20), 1569 (20), 1570
 (5); Castle 1569 (1), 1570 (2), 1571 (19); Ermine
 1572 (16), 1573 (11); Acorn 1573 (11), 1574 (1);
 Eglantine 1574 (10), 1575 (18), 1576 (4), uncertain
 dates (2); Cross 1578 (10), 1579 (7), 1580 (19), 1581
 (3); uncertain dates (5); Sword 1582 (7); Bell 1582
 (1); uncertain i.m. of 1582 (1); Bell 1583 (6); T
 1583 (8), 1584 (2), uncertain date (1); uncertain
 i.m. of 1584 (2); Escallop 1584 (1), 1585 (5), 1586
 (2); Crescent 1587 (3), 1588 (3), 1589 (3); Hand
 1590 (5), 1591 (7), 1592 (3); Tun 1592 (4), 1593
 (12), uncertain date (1); Woolpack 1594 (5), 1595
 (4); Key 1595 (2), 1596 (3); O 1600 (1); 1 1601 (2),
 1602 (1); 2 1602 (8); uncertain marks and dates (4) 364

Mill Sixpence: Star 1562 (1), Lis 1567 (1) . . . 2

James I.

Half-crown of 2nd issue (Thistle i.m.), attributed
 to Scotland 2

Shilling.

First issue: i.m. Thistle (8), Lis (9), uncertain
 i.m. (1)

Second issue: i.m. Lis (13), Rose (20), Escallop
 (11), Grapes (4), Coronet (5), Mullet (1), Trefoil (3),
 uncertain i.m. (5)

Third issue: i.m. Thistle (1), Lis (2), Trefoil (3),
 uncertain i.m. (2) 88

Sixpence.

First issue: i.m. Thistle 1603 (13), 1604 (2); Lis
 1604 (8)

Second issue: i.m. Lis 1604 (3), 1605 (3); Rose 1605 (5), 1606 (3); Escallop 1606 (6), 1607 (2); Grapes 1607 (1); Coronet 1607 (3), 1608 (3); Key 1609 (1); Tower 1613 (1); Trefoil 1613 (1) .
 Third issue: i.m. Thistle 1622 (1); Lis 1623 (3); Thistle 1624 (5) 64

Charles I.

Half-crown of Tower Mint.

i.m. Lis (1), Harp (3), Portcullis (6), Bell (6), Crown (7), Crown with plume over shield (1), Tun (8), Anchor (11), Triangle (17), Star (21), Triangle in Circle (53), uncertain i.m. (6) . . . 140

Shilling of Tower Mint.

i.m. Lis (2), Feathers (2), Harp (14), Portcullis (6), Bell (14), Crown (30), Crown with plume over shield (3), Tun (52), Anchor (31), Triangle (42), Star (39), Triangle in Circle (72), uncertain i.m. (20) 327

Contemporary forgeries of Shilling with i.m.

Feathers (with plume over shield), Tun, Anchor, weighing 72.8, 74.2, and 53.8 grains respectively 3

Aberystwyth Shilling (Book i.m. both sides) . . . 2

Scottish Shilling (Thistle i.m., F over crown on *rev.*) 1

Sixpence of Tower Mint.

i.m. Lis 1625 (4), Rose with plume over shield (1), Harp (3), Portcullis (1), Bell (8), Crown (13), Tun with oval shield (13), Tun with square shield (5), Anchor (5), Triangle (6), Star (6), Triangle in Circle (4), uncertain i.m. (3) 72

Total 1,187

G. C. B.

REVIEWS.

Pietas. By DR. JOSEPH LIEGLE (offprint from *Zeitschrift für Numismatik*, 1932, pp. 59 ff.).

THE conception of *Pietas* is fundamental in the Roman character—peculiarly Roman and correspondingly difficult for us to understand. It is also one to which coins have a very important contribution to make. Dr. Liegle's essay, therefore, based as it is on a happily combined use of literature and coins, has a real value for the Roman student and a special attraction for the Roman numismatist. His work falls into three main sections: (1) the Empire from Galba onwards, (2) the Republic, (3) Augustus; the order is justified by the need to treat the period richest in evidence first. We will take each section in turn.

In Section 1 Dr. Liegle bases his views on the remarkable sestertius of Galba, with reverse **PIETAS AVGVSTI S.C.**, *Pietas* standing l., with right hand raised, by altar, on which is a figure of Aeneas with Anchises and Ascanius, and behind which is a bull. The *Pietas* is the "*pietas erga deos*" of Galba; the figure of Aeneas suggests Lavinium, the home of the "*gens Sulpicia*", and also the Julio-Claudian line; this and the bull incline us to think of a worship by Galba of *Divus Augustus*, as symbol of the continuity of the Empire. This religious sense of *Pietas*, commonly with reference to the "*divi*" of the imperial house, tends to dominate all later use. Dr. Liegle's argument is, in any case, fruitful and interesting, but he seems to us to miss some part of the meaning of Galba's sestertius by treating it as a single isolated coin. As a matter of fact, it belongs to a very clearly defined and remarkable series, which is very probably posthumous—struck in Galba's honour by Vespasian. The arguments for this view are very strong, if not absolutely decisive, and Dr. Liegle himself seems willing to admit that they may prove to hold good. But the point, whether the issue is of Galba's own striking or no, is not, as he thinks, of minor importance. "*Augusti*" in "*Pietas Augusti S. C.*" must, says he, refer to the Augustus of the obverse, Galba. But in the third century it is quite common to find "*Augg*", and even "*Aug.*" on the reverse of Caesars,

where the reference must be either to the senior emperor and his family or to the senior emperor alone. If this analogy is rather far away in time, let us look at another reverse in this same series of Galba himself, **SENATVS PIETATI AVGVSTI S. C.**, the Senate crowning an emperor, holding Victory and olive-branch. Liegle claims to recognize in this figure Galba himself, and again applies the "Augusti" to him. But this reverse of Galba is most intimately connected with an identical reverse type of Vespasian (A.D. 71), but with reverse legend **CONCORDIA SENATVI S. C.** Liegle dismisses the coin of Vespasian as a weak copy of Galba's—a dangerous judgement to pass, when hardly a single first-class specimen of either coin is known to exist. But, actually, the two coins can hardly be understood apart from one another. The type shows the Senate crowning an emperor, who is bringer of victory and peace; the branch, which is carried by Senate as well as emperor, is, probably, the olive of Pax rather than the palm of Victory, even if on modern re-touched specimens it may show some resemblance to a palm. The two legends are complementary, "Concordia to the Senate", "The Senate to the Piety of Augustus"; a verbal notion, conveying some idea of giving or honouring is implied—not the direct action of Senate crowning emperor, which would require accusative rather than dative, and would only cover one of the two legends. It is natural to see here an exchange of courtesies between the Senate and an emperor, who brings victory and peace with him: "The Emperor—our Bond of Union (Concordia)—honours the Senate", "The Senate honours the Piety of our Emperor". If the series is posthumous the emperor here can only be Vespasian, and we must reconsider our decision about the "Pietas Augusti" type. Liegle's references to Lavinium and Divus Augustus remain interesting and valuable as ever. It is probable that there may be reference to a cult of Divus Augustus by Galba. But Vespasian has almost certainly his part to play in the drama. Perhaps, even so, Dr. Liegle's conception of Pietas need not be seriously altered; we have only gone closely into detail because he seems to us too much inclined to the old habit of commenting on isolated coins out of their exact context. The only modification needed in his general conception of Pietas is perhaps this. He is inclined to subdivide Pietas into several headings—"erga deos", "erga patriam", "erga parentes"—whereas, to the Roman, Pietas covered all. You cannot deprive

the word of its general meaning, even when some particular phase is emphasized. *Pietas*, even when most definitely family affection, is still piety also to the gods, who sanction that affection.

In the second section Dr. Liegle has made an admirable collection of passages from literature and inscriptions that show "*Pietas*" as an important element in Roman thought and, what is more, in Roman statesmanship. Rome prides herself on waging only "pious" wars. In the whole of this section Dr. Liegle is remarkably successful. In treating of the types of individual moneyers, he is, of course, hampered at times by uncertainty as to date, but he has no difficulty in explaining the "*Pietas*" types of the Pompey family and in suggesting a probable meaning for the "*Pietas*" of Decimus Brutus. The reverse of M. Herennius is perhaps rather Aeneas and Anchises than one of the Catanean brothers; can you easily separate the pair? It is the coinage of L. Antonius ("*Pietas Cos*") for his brother Marcus that gives Dr. Liegle the opportunity for his most brilliant suggestion. The coins fall into two main series—presumably from two mints. Grueber assigns both to Gaul, but, in this period, Italy is certainly more probable. The reverse of one series shows legend "*Pietas Cos.*", and type, Fortuna Primigenia of Praeneste holding one of her lots in her right hand and in her left a cornucopiae containing several small storks. Liegle points out that the reverse type combines characteristics of Fortuna and *Pietas*, and that it was at Praeneste that L. Antonius mustered forces for his brother and sheltered his children; he attributes the coins therefore to a mint in that city. This suggestion is most attractive and will, we may hope, stand a thorough testing; we trust that Dr. Liegle himself will work out the mint possibilities involved in his suggestion. We are involuntarily reminded of Servius's strange comment on "*dives Anagnia*", to the effect that the town was called "*dives*" because Antony struck coins for Cleopatra there. Is it quite so certain, after all, that Anagnia is nothing but a silly misreading of ARMEN · CAPT ·? One might state a case for the view that, till the final break with Rome, Antony found it advisable to exercise his mint-rights in Italy.

In the third section, on Augustus, Liegle has no difficulty in showing the importance of "*pietas*" as one element in the principate. His own particular insistence on the "*clipeus virtutis*", given "*virtutis clementiae iustitiae*

pietatis causa" and on the grouping of virtues, "virtus-clementia" (military prowess—generosity to the defeated foe, virtues of the "imperator"), "iustitia-pietas" (justice-piety, virtues of the "princeps")—fruitful and interesting as it is, has no claim to exclusive correctness. "Clementia" can mean "mercy to opponents at home" as well as abroad; "iustitia" and "pietas", as Liegle himself demonstrates, can refer to dealings with foreign powers. In the case of Augustus one cannot speak of "pietas" without waking memories of his filial piety to Divus Iulius.

We have not nearly exhausted the interest of this very able paper nor done full justice to the variety and skill with which the theme is developed and exemplified. Dr. Liegle is already known to numismatists by several useful essays, showing ample evidence both of acumen and scholarship. The present essay encourages us to hope for very great things from him in future. If we have challenged him at some length over one or two points of detail, it is because we feel that he occasionally allows himself a positiveness in assertion which is not justified by the conditions of the case. But enough and more than enough of grumbling. This is a paper we shall all do well to take to heart.

H. M.

Ueber das Wesen des Münzgeldes: eine sach- und begriffsgeschichtliche Studie. Von Prof. Dr. Bernhard Laum. Pp. 72. A. Riechmann & Co., Halle a. S., 1930.

The main object of this original and stimulating little essay is to determine the meaning of the word "money", by tracing its derivation from the Roman "moneta". Prof. Laum begins by discussing the differences between the two modern terms "money" (coin) and "medal" and has no difficulty in showing that in Rome coin and medal (medallion) did not differ in the same way; both, as products of the "moneta", could themselves be called "moneta"—the plural "monetae" used by Laum seems to be uncommon, to say the least. It is not, however, safe to say that the bronze medallions are invariably multiples or subdivisions of the sestertius; their weights are most irregular and, in fabric and choice of types, they diverge markedly from the regular coinage. To reinforce his view that to the Roman

"moneta" meant much more than our "money" does to us, Laum points out the extreme rarity of references, either in type or legend, to commercial life: he might have found some that he has omitted, had he searched a little closer—notably the caduceus, symbol of Mercurius, often used as an independent type. Laum then remarks on the intimate relationship of Aequitas and Moneta shown by their common attributes, scales and cornucopiae, discusses the meaning of "Moneta", rejects previous interpretations and suggests a new one of his own—the "distributor". Latin Moneta was used to translate Greek *Μημοσύνη*. In Greek the *αἰσινμήτης* is interpreted to mean one who distributes justice (*τὰ αἴσια νέμει*). The roots *μη-*, mon-, then, both mean "distribute", and Moneta, in Latin, should mean the "distributor". This explanation, if linguistically possible, is highly attractive, for it would establish precisely that close relation of Aequitas and Moneta that our coins suggest. It deserves the most careful consideration. Laum then discusses briefly the precursors of coined money—portions of sacrifice, rings, &c., and, following on this, the original functions of money, to supply marks of honour, tokens of remembrance, religious tokens, tokens of alliance or association. Moneta, then, in ancient times has a far wider meaning than her modern derivatives, and unless we make due allowance for this, we shall constantly misjudge ancient coinage. Laum concludes with a very just protest against the over-estimation of the importance of metrology.

Laum makes out a very strong case for a large part of his thesis, but will seem to many to spoil a good argument by putting it in the form of a paradox. Every Roman numismatist knows that the Roman coin is medal and coin in one: few will be unwilling to admit that it can come very near to the *tessera* or token too. But it is another matter to suggest that its primary purpose was not commercial. Laum's book, stimulating as it is to the specialist, may be seriously misleading to the non-expert. If his interpretation of Moneta as "distributor" is correct, one must ask next what she primarily distributes. The answer will surely be—money for the public services, money for the largesses, money for the pay and donatives of the army. The book, however, remains a most attractive contribution to numismatic studies—daring, original, and arresting.

H. M.

Geld und Wirtschaft im römischen Reich des vierten Jahrhunderts n. Chr. Von Gunnar Mickwitz. (Societas Scientiarum Fennica. Commentationes Humanarum Litterarum, iv. 2.) Pp. xv, 232. Helsingfors, 1932.

This is a very important contribution to a very important problem—the problem of the part played by economic causes in the changes that passed over the Roman Empire in the fourth century A.D. It is impossible to overlook the problem, for it lies right across the social and economic history of the time; but, unfortunately, it is quite easy to misunderstand or to mis-state it. We are not infrequently told that the debasement of the coinage led to a general flight from money and a return to a “natural” economy—sometimes, also, that under these conditions a form of state-socialism emerged, under which the government received payments and paid salaries in kind and, through a system of great state factories, controlled the production of all the main essentials of life. A close check should be kept on all such wide generalizations; to enable us to keep such a check is perhaps the main purpose of Dr. Mickwitz’s book. He has mastered and reviewed the facts—and theories—of coinage; he has immensely strengthened this material by a study of the wealth of papyri from Egypt. He has not only assembled material for others to use, but has himself shown the lines on which use of it should be made. He compares the changes in economic life as revealed in the papyri with the changes in monetary system as revealed by the coins, and then challenges current theories to face the comparison. His results are very interesting and, to us, generally conclusive. A series of inflations of the coinage led to disuse of coined money over a certain range of life. But the effects of these inflations on ordinary business life, though acute at times, were not nearly as extreme, as lasting, or as universal as has sometimes been supposed. It was the State, not the private man of business, that went farthest on the way back to “natural” economy, though even the State began to return to the general use of money in the later fourth century, by allowing *adaeratio*, the commutation of payments in kind for money. It is a remarkable fact, however, that we do find a government, dealing mainly in kind, in a society still dealing mainly in money—a fact that finds its explanation in the special interests of the classes best represented by government, the army, the civil service, and the great landowners. It

can never be an easy task to master the whole of Dr. Mickwitz's material or to follow every turn of an argument that, even as presented by so clear a thinker, has its peculiar difficulties. None the less his book will be indispensable to the future student of economics or of coins.

In the present review it is only right that the sections on coin-history should receive special attention. Mickwitz has studied his material carefully, and cites most of the authorities up to the present time. Where he does decide with confidence, he has usually good reason to give for his decision. In a few cases he is perhaps too hesitant, too unwilling to decide between rival theories. He seems occasionally not to catch the exact drift of an argument in English (cp. e.g. p. 102, n. 14). But, in the main, he has steered a wise course over a sea that bristles with rocks; and, if sometimes he really sails round, not through, difficulties, such blame as there is may well be charged to numismatists for not having charted the channels better. In any case, the numismatic sections are only a part, and perhaps not the most important part, of the book.

After a short introduction, in which he defines his economic vocabulary, Mickwitz deals in chapter I with the coinage down to the Edict on Prices of Diocletian. The main fact observed is the debasement of the silver coinage, the main problem raised the cause or causes of that debasement. The critical point is the tariff of the debased denarius in terms of the aureus. As long as only twenty-five base denarii went to one aureus, not correspondingly debased or reduced in weight, debasement can have only two causes—a real change of the relative value of gold and silver or inflation of the silver coinage. Mickwitz seems to us to come rather late in his argument to this question of tariff, and to handle it a little too lightly (p. 37). He is inclined to allow too much scope to a shift in the rates of the metals and too little to the inflationist policy of the government. He is certainly wrong in supposing the disappearance of denarii after Nero from far eastern hoards to be due to anything but their debasement (p. 29). Again, he seems to us to accept too readily Heichelheim's claim to have demonstrated that there was a drop in the price of gold due to Trajan's acquisition of the treasure of Decabalus (pp. 32 f.). All that Heichelheim shows is a fall in a high tariff of gold in terms of local Alexandrine potin. He has no evidence to suggest that the denarius ($\frac{1}{25}$ of the aureus) did not faithfully follow its tariff. On the reform

of Aurelian Mickwitz prefers to reserve judgement, but is inclined to regard the much debated XX. I as no sign of value after all. From the Edict of Diocletian he deduces the existence of two coins of minor value—5 and 2 denarii respectively—and finds them in the two chief denominations of bronze, with laureate and radiate head respectively (pp. 61 ff.). As the larger of these bears the same mark, XX, as Aurelian's radiate coin, Mickwitz assumes that that coin, too, in its time was a 5-denarius piece. This is far from being the least likely solution of these problems presented. But, in our opinion, Mickwitz assumes without authority that the nominal value of Diocletian's bronze coins expressed their exact metal value and that they were in no sense token coins; he ignores something like a consensus of trained opinion that XX. I is a mark of value and nothing else. He omits—only to mention it in a later note (p. 176, n. 14) as an unsolved problem—the remarkable evidence that the sestertius retained something like its old value in A.D. 289 when the denarius had already crashed, and, finally, shows no real evidence of having seriously pondered the strong argument built up around this and similar evidence in the article "Sestertius and Denarius under Aurelian" (*Num. Chron.*, 1927). In spite of this, Mickwitz's general interpretation of the monetary policy of the Empire may not seriously astray. His suggestion that Diocletian in his Edict was aiming at profiteering at the expense of his standing army is attractive. In chapter II Mickwitz discusses the monetary system of Diocletian and Constantine, emphasizes what is known for certain about the gold and silver, and fairly states the difficulties that arise about the bronze. Mickwitz rightly rejects the more questionable of Seck's hypotheses—perhaps at rather greater length than should be necessary to-day. In chapter III he traces the amazing changes of money-values in Egypt after 301, and charts the periods of maximum inflation and the occasional intervals of stability or deflation between them. It becomes clear that the scale of change is far wider than that in the Empire as a whole. There is a very interesting discussion (p. 104) of some remarkable references in papyri to τὸ Ἰταλικὸν νόμισμα; it is hard to understand why Mickwitz does not at least try to explain the phrase in its most natural meaning—the imperial money as opposed to the native Alexandrine of before A.D. 296.

In chapter IV Mickwitz traces the effects of the money crisis in Egypt, as seen in soaring prices and in the use of

"naturalia" for money, in payments and accounts. His evidence, drawn from ground-rents, loans, wages and the like, tends to show that the disturbance of economic life was much less than might have been expected. In chapter V Mickwitz turns from Egypt to the Empire as a whole and considers to what extent Egypt is a fair representative of it. He collects a most interesting material from the sermons of the Church Fathers, which seems to support his main thesis, that the ordinary man continued to use money much as he had done before.

In chapter VI Mickwitz describes the chief features of the financial administration in the fourth century. He suggests reasons why the State chose to levy taxes and pay salaries in kind, and shows how, in the second half of the century, *adueratio* began to bring back the old conditions. He discusses the special economic interests of special classes—e.g. farmers and civil servants—and suggests how economic pressure may have helped to found the status of the "coloni". The book closes with a short and clear summary of results.

This, we repeat, is a very important and valuable book, wide in range, sound in judgement, masterly in general plan and outlook. If we have criticized Mickwitz's treatment of coin problems at one or two points with some sharpness, it is just because we think his judgement valuable enough to be considered seriously. If he has not always solved the problems he has touched, he has always placed at our disposal new and valuable evidence with which to judge them. It is a book to study and be thankful for.

H. M.

Pietas (pius) als politischer Begriff im römischen Staate bis zum Tode des Kaisers Commodus. Von Theodor Ulrich. Pp. viii, 94. Breslau, M. & H. Marcus, 1930. (Historische Untersuchungen, edd. Kornemann u. Kaehler, no. 6.)

The subject of this essay has been very happily chosen. References to "Pietas" are plentiful in literature, representations of "Pietas" are common in archaeology, particularly on coins. A detailed study of the virtue-goddess, "Pietas", ought then to make her far more real to us and, at the same time, help us to understand the part played by her in Roman thought. We call "Pietas" a goddess advisedly. Dr. Ulrich, it is true, quoting from Wissowa, describes her as "the third in the series of quite freely created abstractions". To the Romans she was, beyond all

question, a goddess—a *numen*, certainly, if you must find another description for her, a mere abstraction never. It is difficult to understand why so many good authorities insist on using the word "abstraction" to describe Pietas and her kindred goddesses, such as Pax and Fides.

Dr. Ulrich has made excellent use of the material now available for use in the stores of the new *Thesaurus Linguae Latinae* and has traced very ably the development of meaning of the word "pietas". Augustus, for example, is "pius" in the same sense as "pius Aeneas", not "pius" only towards the gods or towards his kin, but "pius"—the slave of duty—in all relations of life. Under the Empire two new shades of meaning develop. The "pius" (loyal) subject offers his devotion to the "pius" (gracious) Emperor who accepts and requites it. These are merely isolated examples of the interesting and valuable results obtained in this part of the essay, in which, as a whole, we may say that Dr. Ulrich maintains a very high standard.

There are one or two points in which Dr. Ulrich is less successful. If we are to use the evidence of coins to interpret "Pietas", we must command a knowledge both wide, deep, and patient. Dr. Ulrich seems at times to be too easily content with snatched conclusions, which will not always bear closer scrutiny. The failure to make any use of such an indispensable article as C. H. Dodd's on Antoninus Pius (*Num. Chron.*, 1911) is symptomatic of this defect. It is only just to quote a few examples. On page 13 the denarius of D. Postumius Albinus is assigned without comment to 43 B.C.: the date 49 B.C. is perhaps to be preferred—it *must* be considered. On pages 50 and 51 we miss any adequate discussion of the interesting "Pietas" types of Drusus (Livia) and Caligula. Even if the "Pietas" of Drusus represented Antonia, which it probably does not (Tiberius's "Salus Augusta" may), there is no excuse for omitting to discuss it (page 50, note 4). On page 57 we read that Marciana was only consecrated by Hadrian. In view of coins of hers (Cohen 1, 2), giving the title of Trajan without the legend "Parthicus", is this even possible? On page 70 we read that "in the circle of the virtues of Antoninus Pius Virtus is missing". The only comment on this is that she is not, as a glance over his coin-types will show. Or, if Dr. Ulrich is merely expressing a personal opinion—that opinions may differ. An interesting discussion of Commodus as "auctor pietatis" in particular reference to Eastern cults might have been strengthened by

reference to his recorded encouragement of the worship of Cybele.

In spite, however, of such incidental imperfections our general verdict must definitely be a favourable one. The book is planned on sound lines, is well written and well constructed, and opens up prospects of further study on similar subjects. Even while we criticize a detail here and there we shall learn much from it and be grateful.

H. M.

Die Systeme des römischen Silbergeldes im IV. Jhdt. n. Chr. Von Gunnar Mickwitz. (Societas Scientiarum Fennica. Commentationes Humanarum Litterarum, vi. 2.) Pp. 69. Akademische Buchhandlung, Helsingfors. [1932.] Mk. 31.

Dr. Mickwitz, who recently showed his mastery of the coinage in his study of Roman Economics, has now undertaken a definitely numismatic theme. It is only just to say at once that his book, by its clear thinking and admirable method, marks a new stage in the study of the subject, and that some part, if not the whole of his results is likely to be accepted as a permanent addition to our knowledge.

Let us state first what these results are. The *siliqua*, we know from the inscription of Feltre, already existed in A.D. 323. We assume that it must have been a common coin and can therefore identify it only with the silver coin of Diocletian and his colleagues, of 96 to the pound. The implied rate of gold to silver is 1 to 18 ($1/96$ th lb. $\mathcal{A} = 1/96 \times 18$ th lb. $\mathcal{A} = 1/1728$ th \mathcal{A} —the *siliqua* of gold struck as a silver coin). After A.D. 360 the system was changed. The price of gold rose from 1:18 to 1:20 or 21; the weight of the *siliqua* was accordingly increased, but, instead of the whole, the half-piece was now struck. It is the coin which we usually call *siliqua*. Later, the price of gold fell again to 1:18 (we have evidence for the year A.D. 422) and the weight of the half-*siliqua* was therefore reduced. Earlier *siliquae* were clipped to correspond with these later reduced pieces. Dr. Mickwitz will not admit the view that the silver of this period was struck regularly below its official standard. Then follows an interesting discussion of the Frankish system, with its *solidus* of 40 *denarii*, which does not, however, lead to any certain conclusion. We come next to the *milliarensis*. Mickwitz regards it as certain that there is more than one denomination included under what we are accustomed to call *milliarensia*. He leaves both the

origin of the name and the relation of *miliarense* to half-*siliqua* and *siliqua* undecided. Finally, a new terror for numismatists appears in the shape of curves designed to show variations of weight. There is a normal curve, to which weights of a single denomination may be expected to, and do as a matter of fact, conform: abnormal curves suggest a confusion of denominations. The method is then applied to distinguish coins of 1/72nd from those of 1/60th of a pound.

The suggestion that the *siliqua* was originally the 1/96th coin of Diocletian seems very likely to prove correct. A high value of gold to silver (1:18) should not frighten us. Silver had dropped largely out of circulation and, on modern analogies, may be expected to have fallen in price. Far more open to question is the identification of our later "*siliqua*" of c. 30 gr., 1.9 grm. as really a half-*siliqua*. This involves postulating a further drop in the price of silver, whereas our one ancient authority suggests a rise. This "half-*siliqua*" is admitted to be the same coin as the CN (250) coin of Ostrogothic days. As the *solidus* stands at par at 6,000 *nummia*, the *siliqua*, 1/24th *solidus*, is precisely 250 *nummia*. It is very difficult to accept the 250 as representing not *nummia* but half-*nummia*, even if the name *miliarense*, "thousander", as the twelfth of a *solidus*, might be used to support the view. In refusing to consider seriously the view that the *siliqua* was regularly struck light, Dr. Mickwitz seems to us too doctrinaire. Diocletian's 1/96th was commonly so struck. The clipping of the silver does not really suit his conclusion. *Siliquae* of Honorius, as well as of Constantius II, for example, are found clipped. The use of variation curves to establish weights presents some initial difficulties to the non-expert: it may well be that we shall have to take it very seriously in future. The book is a contribution of great value to the thorny history of the coinage of the fourth century: may it soon find successors and rivals. We congratulate Dr. Mickwitz on what he has already achieved, and trust that he will persevere in a field where unsolved problems are still lying thick. H. M.

Le Monnayage de l'Empereur Marc-Aurèle et les Bas-Reliefs Historiques Contemporains. (Extrait de la *Revue Numismatique*, 1932, pp. 127-172.) By Prof. J. Dobias. With 2 plates. Feuardent Frères, Paris, 1932.

This is a valuable and well-documented contribution to

the history of the Danube wars of Marcus Aurelius and the interpretation of the coinage and bas-reliefs relating to them. Professor Dobias borrows skilfully from the bas-reliefs to illustrate detail which on the coins is left more or less obscure. He more than pays back the debt, by using the coins to provide correct dates for the bas-reliefs and to cancel certain specious but undoubted errors which have grown up around them. The whole essay is a convincing piece of close research, based on texts, coins, and other archaeological evidence, and should at once take its place in the modern criticism of the period.

The bridge on the coins, with legend **VIRTVS AVG.**, is to Professor Dobias, Marcus's bridge over the Danube: he is content not to be too positive as to the precise meaning of **VIRTVS** in the passage; it might refer merely to the feat of crossing the Danube. The scene of "adlocutio", with legend **PROVIDENTIA AVG.**, is dissociated by our author from the presentation of Commodus to the troops. The figure supposed to be Commodus is too old for him and must rather be the praetorian prefect; and, in 172, the year of the coin, Commodus was not with the army, but at the sea near Rome. These objections must clearly be weighed with care. But it is only just to add, on the other side, that the legend **PROVIDENTIA AVG.** is peculiarly appropriate to the "presentation" theory and, if that is dropped, is left unexplained: that it is very possible to be mistaken about the age of the small figures shown on the reverse of a coin, and that we certainly have no complete record of the movements of Commodus throughout the year in question. With reference to the famous story of the miraculous rain, Professor Dobias seems to establish beyond doubt that the type of Mercury, alone or in a temple, with the legend **RELIGIO AVG.**, must refer to this very miracle and the part in it attributed to the Egyptian magician, Arnuphis, and his invocations of "Mercury god of the air". A reference to another miracle of the war is convincingly demonstrated in the reverse **IMP. VI COS. III**, Victory crowning Emperor, who holds thunderbolt and spear; in answer to the prayers of Marcus, a thunderbolt fell and destroyed siege-works of the barbarians.

These are but a few examples of the rich historical content of this able and enthralling article.

H. M.

Die syrische Provinzialprägung von Augustus bis Trajan. Von Waldemar Wruck. Pp. viii+199. With 6 plates. W. Kohlhammer, Stuttgart, 1931.

Of the subsidiary provincial coinages of the Empire, Alexandria indisputably holds the first place. To the second, Syria—with its main mint of Antioch—has a very good claim. It was, therefore, a happy idea of Dr. Wruck's to bring together this provincial series under one cover and to present it, suitably illustrated and annotated, for convenient use.

After a short general introduction, dealing with mint-authorities, mints, chronology, money-systems, and the like, Dr. Wruck deals with each reign in turn, in each case commenting on detailed problems connected with the coinage. At the end follow some useful tabulations, showing the various systems of dating, the arrangements of legend on the coins, the imperial titles, the reverse types, a summary publication of the coins themselves, and six excellent plates. The plan of the work partly justifies the absence of an index. The list of abbreviations brings together the works most freely consulted.

Dr. Wruck has done his work with great accuracy and diligence. He has left very few corners unexplored, and has usually succeeded in giving a satisfactory answer to difficult questions. When he discusses the meaning of the S·C· on the provincial copper, he is perhaps too easily satisfied with offering some kind of explanation of what is undoubtedly a surprising fact. The question of the senate's relation to the Emperor outside Rome might have been considered more generally in this context. The most interesting single point of chronology is the double date on certain coins of Nero—year of the Emperor and year of the Caesarean era side by side. Dr. Wruck states the case fairly and points out that the year of Nero can under no circumstances be his tribunician year, as reckoned *a die in diem*. It must either be a tribunician reckoning, renumbered from a beginning on the 9th of December (in A. D. 59 ?) or a reckoning of the Emperor's reign peculiar to Syria. Wruck inclines to the former view; but it should always be remembered that, for Rome itself, the renumbering of Nero's tribunician power is still subject to serious doubt.

The chief complaint that might be made against the book is that too much space is wasted on repeated discussions, reign by reign, of points that might be disposed of once and for all in the General Introduction, and that the space

and energy thus wasted might have been better used in concentrated attack on the few problems of real difficulty. Again, some coins that are certainly provincial of Syria—e.g. tetradrachms of Nero, and Divus Claudius—should have been included. But it would be ungrateful to insist too much on these imperfections. Dr. Wruck has gone a long way to bridging yet one more of those chasms which impede our advance to a full knowledge of the coins of the Roman Empire.

H. M.

The Quarterly of the Department of Antiquities in Palestine, vol. i, 3, 4 (1931), ii, 1-4 (1931), iii, 1-2 (1931). 5s. each part (Milford).

Among articles of numismatic interest in this periodical we may mention "Further Notes on rare Imperial coins in the Palestine Museum", with three plates, describing unpublished coins of Ascalon, Eleutheropolis, Gaza, Raphia, Caesarea (Samaria) Diospolis, Ptolemais-Ace, Nysa Dora, Bostra, Damascus, Gadara, and Philadelphia; an account of an interesting find of Philisto-Arabian, Phoenician, and other fourth-century coins, with two plates; the description of a Constantinian hoard from Northern Palestine; and an account of some lead pieces of the Mamluk Barkuk, which raises some interesting problems. Numerous other articles add to our knowledge of the archaeology, architecture, and epigraphy of Palestine, the Byzantine and Muslim periods receiving their share of attention.

J. A.

Catalogue of the coins found at Corinth 1928. By Alfred R. Bellinger. Milford: London, 1930. Pp. xii, 95. 2 plates. 10s.

This is a detailed catalogue of all the coins found at Corinth in the excavations of the American School in Athens in 1925, with the exception of some 800 which were rejected as in too poor condition. Those published illustrate the history of the site for 2,500 years. They consist of didrachms of Corinth, numerous bronze coins of Corinth as a Roman colony, Roman Imperial coins from Augustus to Leo I, Byzantine coins from Anastasius to Alexius II, coins of the empire of Nicaea and Latin dynasts of the twelfth and thirteenth centuries and of contemporary French and English rulers, among which we may note short- and long-cross pennies, coins of Venice and her colonies, and modern pieces of Greece, Turkey, and the Ionian Islands; the

non-local ancient coins include pieces from Sicily and Macedonia and imperial coins of Thrace, Laconia, Megara, Argos, and the Achaean league, the latter rather surprisingly represented by one coin only, and that not of Corinth. The note on cleaning coins will be found valuable by antiquaries in this country. J. A.

The Symbols on Staters of Corinthian Type (A Catalogue). By Jean B. Cammann=no. 53 of the A.N.S. Monographs. Pp. 130. 14 plates. New York, 1932. \$3.

This is an exhaustive index of all the symbols found on the staters of Corinth and her colonies and other towns which used the pegasus for commercial or political reasons. The book contains an index of mints with the symbols found at each and an index of symbols in alphabetical order with details of the coins on which they occur under each. References to the plates are given under the first index. Mrs. Cammann has produced a very thorough and useful piece of work. It is unfortunate that the plates are not up to the usual standard of the A.N.S. monographs. J. A.

Βυζαντιακά μολυβδόβουλλα, συλλογή Ἀναστασίου Κ. Π. Σταμούλη. Pp. v+86. By K. M. Konstantopoulos. 4 plates. Athens, 1930.

Bulletin de Sigillographie Byzantine. By V. Laurent. Pp. 74. Brussels (*Byzantion*), 1930.

Un Sceau inédit du protonotaire Basile Kamateros. By V. Laurent. Pp. 20. Brussels (*Byzantion*), 1931.

The part of these little works is a catalogue by the Director of the fine collection of Roman and Byzantine seals formed by M. Anastasius K. P. Stamoulis and given by him to the National Numismatic Museum in Athens. It contains 139 specimens of which 84 are illustrated in the plates. The Greek seals are classified according to types and the book has full indexes of names, titles, metrical legends, iconographical types, &c. Among the latter we may note the St. Basil on no. 23 and the Annunciation on no. 108. It forms a very useful introduction to Byzantine sigillography and seems to be the first collection to have been properly catalogued.

M. Laurent has reprinted from *Byzantion* his survey of the progress in Byzantine sigillography in the preceding

fifteen years. It consists of an index of seals published in this period classified under titles and dignities, officers, and private individuals. Indexes of family names, metrical legends, iconography, and geography are also given. It is a useful survey making readily accessible much scattered material.

In the same periodical M. Laurent publishes a recently discovered seal of the protonotary Basil Kamateros Ducas of the twelfth century and gives the results of much elaborate genealogical and historical research. J. A.

Animals in Greek Sculpture. By Gisela M. Richter. Pp. 87. 66 plates and 11 figs. Oxford, 1930. 30s.

This is a very full collection of representations of animals by Greek artists on sculpture, gems, and coins. It is confined to wild and domestic animals, mythological and fabulous beasts being excluded. The book contains an introduction giving brief accounts of the place occupied in ancient life and sport by the beasts in question, a full description of the illustrations with references to the location and previous publication of the originals, which are illustrated in the 66 excellent plates forming the last third of the book. The great majority of the objects illustrated are chosen from the period before 400 B.C. Miss Richter has produced an attractive book which ought to have a wide appeal. While not professing to be a corpus, it will be very useful. It is unfortunate therefore that the book has no index, for the animals illustrated are not in any special order, unless it be size and frequency of occurrence.

J. A.

Münzkunde. By K. Regling. Teubner: Leipzig, 1930. Pp. 37. Mk. 1.80.

This is the fourth edition of Professor Regling's admirably succinct yet lucid account of Greek and Roman numismatics from Gericke and Norden's encyclopaedia of classical antiquities (*Einleitung in die Altertumswissenschaft*). The text is in the main that of the last edition, but it has been carefully revised and brought up to date, as is shown by the numerous references to the literature of the intervening period. It is a singularly valuable handbook for the student of antiquity, for it treats coinage from all aspects, historical, economic, archaeological, and is ridiculously cheap.

J. A.

Excavations at Olynthus: Part III. The coins found at Olynthus in 1928. By David M. Robinson. Pp. xiv, 129. 20 plates. Baltimore, Md., 1931.

This is a detailed catalogue of the 1051 identifiable coins found during the John Hopkins excavations at Olynthus in 1928. These consisted of two hoards and about a thousand isolated coins. The first hoard was a small one of archaic pieces of Terone and Sermyle (Sermyleia) and the second of small Chalcidian pieces with seven of Perdiccas II. After the descriptions of the hoards come the isolated silver and the bronze coins, neither, unfortunately, arranged in geographical order. The predominance (some two-thirds is the proportion) of Chalcidian coins goes to prove that the site was Olynthus, the centre of the Chalcidian League. New types are recorded of Sermyle, Potidia, Apollonia, Aphytis, Atrax. While we are glad to see the coins done so well, we must say that the printing of the text errs on the side of extravagance. It is unfortunate that so many of the pieces are so poor.

J. A.

Mein Werden und mein Wirken. By Adolf Erman. Pp. 303. With 12 plates. Quelle und Meyer: Leipzig. 12 marks.

This autobiography of the great Berlin Egyptologist is a most attractive and entertaining book. Thanks no doubt to his French and Jewish ancestors, there is nothing of the heavy Gelehrter about his style and he writes with a singularly witty pen, perhaps not always quite free from malice. Throughout his long career he has always observed the most interesting side of life. The book is full of good stories and witty anecdotes and he has a remarkable gift of characterization. Most of the great names of German scholarship of the nineteenth century appear in his pages, for he comes of a family of scholars. Professor Erman writes with equal charm of life in Berlin, as a quiet provincial capital in the middle of last century, of his student days in Leipzig, of his travels in Egypt and of his work in creating the Egyptian section of the Berlin Museum. Here we are mainly interested in his account of his early days in the Münzkabinett, where he started his career as an Orientalist, although his most lasting claim to fame as a numismatist is the pioneer work he did on the German renaissance medal. Among the figures who live again in these pages are Friedländer, who made the Berlin coin collection, his successor von Sallet, and Schöne, the maker of the Berlin

Museum. His thumbnail sketches of the little dealers, the typical visitors, and the great and small collectors who frequented the coin cabinet in these days are vivid and witty if not always kind. With the author's later and wider interests we are not so concerned here, but no one who begins the book can fail to finish it, for the author writes of everything with the same delightful touch. The book is full of good anecdotes—of Adolf Weyl saying "What would Berlin say?" when Dannenberg proposed to drop their controversy on some obscure point of medieval numismatics; of Timpe, a little dealer—who, like many people in these pages, was a character—deducing that a coin sent him was valuable from the fact that it was wrapped up "wie so ein fürstliches Hurkind"; of Ernst Curtius holding up his hands in horror at Dörpfeld's discoveries at Olympia which suggested that his beloved Hellenes "ihren Göttern Häuser aus Dreck gebaut hätten". J. A.

Sylloge Nummorum Graecorum. Vol. ii, part I and II.
 Edited by E. S. G. Robinson. Pp. 16. 16 plates.
 Published for the British Academy by Humphrey
 Milford and Messrs. Spink & Sons, Ltd. 1933.

The new volume of the *Sylloge* is to make accessible the fine collection of coins of Magna Graeca and Sicily formed by Dr. A. H. Lloyd and Miss Lloyd of Cambridge. The portion now published is a double part and covers the mints of Etruria, Latium, &c., Campania, Apulia, Calabria, and Lucania (in alphabetical order) as far as Thurium. The wealth of the collection comes as a surprise even to those who know how extensively coins from sales and finds and even whole collections—notably that of Sir Arthur Evans—have passed into the Lloyd collection in the last fifteen years. Among the more remarkable series are the Etruscan gold, and the coins of Metapontum, Tarentum, and Thurium. The publication of a collection like this lets one see how useful the *Sylloge* will be and it is to be hoped that students and collectors will give it every support. The plates are singularly good, and seldom has a collection been displayed to better advantage. J. A.

Zur Währungsgeschichte des römischen Imperiums im 3. Jahrhundert n. Chr. By Fritz Heichelheim (Sonderdruck aus *Klio*, Bd. xxvi, Heft 6), pp. 18. Dieterich'sche Verlagsbuchhandlung, Leipzig, 1932.

Dr. Heichelheim offers us here a new and startling

suggestion as to the decline and fall of the Roman denarius. He considers that it lost more than half its value under Commodus, but then remained relatively stable until Gallienus, and he supports this theory with a wealth of detailed argument, drawn largely from Egyptian sources. In view of the great interest and novelty of this paper, one is disposed to suspend judgement until one is certain of understanding the argument in all its parts. Meanwhile, some honest questions and doubts will do no harm; if in some cases they are only due to a lack of full understanding of what Dr. Heichelheim means, they may perhaps move him to make the points clearer.

As Heichelheim is drawing largely on Egyptian sources, he does well to begin with a sketch of the Egyptian coinage. The Roman aureus is well known in Egypt. A drop in its market-price under Trajan is taken by Heichelheim to mean a drop in its market value relative to the denarius; but, as the exact market value of the denarius at the time is unknown, this is conjectural. The Roman denarius is equated to the Alexandrian billon tetradrachm (24 obols), but it usually stands at a premium at over 28 obols. Heichelheim seems to us to create confusion by commonly identifying ἀργυρίου δραχμή (denarius) with ἀργυρίου ρυπαροῦ δραχμή (billon drachma—one-fourth of the tetradrachm) and by introducing a χαλκοῦ δραχμή, containing 6 obols, beside the ρυπαροῦ δραχμή containing 7 (pp. 100-101). He supposes that the billon tetradrachm was at some time in the second century rated higher in the market than the denarius; but how that is supposed to be read out of νόμισμα πλέον οὐδ' ἰσχύει οὐκ ἔξδν κερματίζειν passes our grasp: there is question of a value coin, a standard rate, small change—never of two value coins, like billon tetradrachm and denarius. This section, in our judgement, stands in serious need of restatement, if not of actual revision of meaning.

Prices in Egypt are more or less stable down to Commodus, in whose reign a sudden jump to between two and three times the former tariff is observed. Heichelheim attributed this rise to inflation, conjectures a drop of the denarius in terms of the gold aureus, and looks afield for further evidence. In a long known inscription of A.D. 244-245 he finds a value of 325 drachmae, instead of nearly 120, for the aureus: but, alas, there is one uncertain sign in the equation and confirmation is still required. Next, in legal writings, Heichelheim finds a suggestion of an aureus equal to 50, instead of 25, denarii (p. 104), and finally, in the words of Dio Cassius, defining

the aureus as a piece of 25 denarii, he sees a statement not of normal current rate, but of an obsolete value. Finally, by a study of hoards, Heichelheim attempts to demonstrate that the behaviour of the coinage actually suggests the very theory he has elaborated.

Let us say at once what can be said against the new theory. First, the rise in Egyptian prices, even if it presupposes a world-wide rise, does not require a change of rate of the denarius to explain it. The inscription of the reign of Philip gives no certain figure, and in any case is too late to prove anything for Commodus. The legal writings suggest a change of rate for the aureus at some date—not certainly just when Heichelheim argues. The passage of Dio Cassius can be read either way. Even so, suggestions of a powerful case remain. What troubles us more is that Heichelheim's new theory does not seem to us to correspond either to the facts of coinage or of hoards. Heichelheim makes an over-issue of debased denarii by Commodus responsible for the change. But all our evidence suggests that inflation was much more serious under Severus than under him. And hoards show no clear break at Commodus. If the denarius of Commodus was only worth 1/50th of an aureus, how is it that we find it hoarded with earlier coins? Or did the drop in value affect all denarii as far up as Nero? That is not tenable in view of their silver content. Again, we have in our cabinets the radiate coin, the "antoninianus" (double denarius?), which competes with the denarius and finally pushes it out. In the reign of Trajan Decius we find it overstruck on earlier denarii. Then, if ever, we might say, inflation is certain. The double denarius is only worth what an old denarius had been: the aureus is worth 50 of the now reduced coins. But this is more than half a century off Commodus.

The attentive reader will realize that this review, which contains so much criticism, implies a very great interest in Dr. Heichelheim's brilliant suggestion and a very keen desire to encourage further exploration. We trust he will soon elaborate his theme further.

H. M.

X.

THE GOLD COINS OF THE SULTANS OF KASHMIR.

[SEE PLATE XXI.]

THE silver coins of the Sultans of Kashmir were described by Mr. C. J. Rodgers in the *Journal of the Asiatic Society of Bengal* for 1885.¹ Six pages on the coins are followed by forty-one on the history of the Sultans; the last named is based throughout on Firishta. A special dedication to His Highness the Maharajah of Kashmir and Jammu shows that the contribution was intended to be of lasting value. Mr. Rodgers' paper was called the best existing account of an obscure phase of Indian history, and little more can be added as far as the coins are concerned even to-day.² The gold issues have had to wait another half-century owing to their rarity, in fact the material is still so scanty that the description remains far from complete, but it is high time that an account of these pieces, however imperfect, was recorded. The first desideratum is the discovery of additional material, and more specimens will come to light now that attention has been directed to them. I preface my account of the gold coins by some general remarks on the chronology and money of the Kashmir Sultans.

¹ *The Square Silver Coins of the Sultans of Kashmir.* J.A.S.B., vol. liv. Mr. Rodgers had published a preliminary study of the copper coins in J.A.S.B., 1879.

² *The Tarikh-i-Rashidi*, by N. Elias and E. Denison Ross. London, 1895. P. 487.

The indigenous chronicles are involved and obscure, but it is generally accepted that the first Sultan of Kashmir was an adventurer named Shāh Mir who seized the throne from the last Maharajah about the year A.D. 1346 and assumed the title Shams Shāh. I show below that a later attribution is preferable for the silver pieces at present ascribed to the first Shams Shāh; in any case, no coins are known of his four immediate successors. The sixth king, Sikandar Shāh, surnamed Būtshikan (Idol Breaker), was a bigoted persecutor of Brahmans. His son Zainu-l-'Ābidīn was the best known of the Sultans; builder, poet and patron of learning, this tolerant ruler reigned for fifty years and died about A.H. 875, A.D. 1470. The history of the ensuing sixty years is called by Mr. Rodgers a tangled mass of confusion. The perpetual disorder was due to the rivalry of two great families known as the Chakk and the Mākārī; they contended for the office of vizier under dynastic princes whose power was merely nominal. Comparatively firm ground is reached when the Mughal emperor Humāyūn succeeded at Delhi in the year A.H. 937, A.D. 1530. Humāyūn's brother Kāmārān, governor of Lahore, invaded Kashmir without success in A.H. 939. About this time died the Sultan Muḥammad Shāh who appears to have had four separate reigns; he was succeeded by an obscure prince Shamsu-d-dīn, Shams Shāh II. A reliable date is that of the conquest of Kashmir in A.H. 947, A.D. 1540 by Mirzā Ḥaidar Dughlāt, soldier of fortune and author of the *Ta'rikh-i-Rashādī*, a history of his own people, the Mughals. Mirzā Ḥaidar was the virtual king of Kashmir for ten years, but he called himself regent and struck coins in the name of Humāyūn. Curiously

enough Humāyūn was a fugitive throughout this period; he had been defeated at Kanauj by the Afghan Sher Shāh in May, 1540 and did not recover the throne of Hindustan till 1555. Mirzā Ḥaidar fell in a skirmish in the year A.D. 1551. Puppet sultans again exercised nominal authority. Ḥabīb Shāh, son of Ismā'il Shāh, was defeated in 967 or 968 A.H. by Ghāzī Khān Chakk who seized the throne. This native Chakk dynasty reigned till Kashmir was annexed by Akbar, the Great Mughal, in A.H. 997, A.D. 1589. The last two Chakk Sultans, Yūsuf Shāh and his son Ya'qūb Shāh, were given grants of land in the Province of Bihār.³

The obscurity of the period was noticed by Stanley Lane-Poole.⁴ "In the presence of such divergences among the historians, the testimony of the coins becomes especially valuable. These examples of the bewildering uncertainty of the chronology and succession are enough to show that any final list of the kings of Kashmir is unattainable until the numismatic evidence is more complete." Muhammadan coins in general are reliable historical documents, but those of Kashmir give little or no help. Mr. C. J. Rodgers remarked, "What we want in the history of Kashmir is an accurate and trustworthy chronology, yet the coins which we usually regard as worthy of trust prove in this case to be worthless or nearly so. When authorities are so conflicting and coins cannot be trusted, it is hard to come to a decision as to what is correct". (*Op.cit.*, p. 96.) However, Mr. Rodgers, by the time he wrote

³ For the dates I follow Haig, *J.R.A.S.*, 1918. The second Shams Shāh is also mentioned by Rodgers. *Op. cit.*, p. 97.

⁴ *B. M. Cat. Coins of the Muhammadan States of India*, London, 1885. Pp. xlviii.

his Coin Catalogues, had constructed an approximate chronology which was repeated (from the Indian Museum Coin Catalogue, 1893) with two slight modifications by Mr. H. Nelson Wright in *Indian Museum Coin Catalogue*, vol. ii, 1907. Eleven years later this difficult problem was attacked afresh by Lt.-Colonel T.W. (now Sir Wolseley) Haig; the author constructed Tables both chronological and genealogical of the Muhammadan Kings of Kashmir.⁵ Mr. C. J. Brown wrote of this paper that the chronology of these sultans, long in doubt, has now been fixed.⁶ But Colonel Haig had rightly said that his list was a tentative one which might at least form the basis of later investigation. Finality cannot be expected from defective material disfigured by copyists' errors, and tribute is due to those who have so ably laid the foundations for further research. Colonel Haig has reproduced his Tables in the *Cambridge History of India*, vol. iii. The actual list of kings is practically the same as that of Mr. Rodgers but the dates are somewhat different throughout. In his recent comprehensive work of reference Colonel E. de Zambaur repeats Mr. Rodgers' list (as reproduced by Mr. Nelson Wright) up to and including the year 937 A.H.; the rest differs slightly. The names of ephemeral kings are derived from tentative coin readings.⁷

The British Museum collection of these coins is almost complete; it contains all the silver pieces of

⁵ *J.R.A.S.*, 1918, pp. 451 f.

⁶ *The Coins of India (The Heritage of India Series)*. C. J. Brown, Calcutta, 1922. P. 81.

⁷ E. de Zambaur. *Manuel de Généalogie et de Chronologie pour l'histoire de l'Islam*. Hanovre, 1927. P. 293.

Kashmir described by Mr. Rodgers. The money of this mountain valley, remote and difficult of access, has always had its peculiarities. For example, on the pieces now under discussion there is a tendency to mechanical and meaningless repetition of the date. Although Zainu-l-'Ābidin reigned for fifty years, all the silver coins known to me bear one date 842 in both figures and words. This same date 842 appears in Arabic words on the margins of silver pieces which are the issues of kings who reigned long after 842. A square silver coin of Shams Shāh in the British Museum clearly displays this conventional date 842 just as it appears on the money of Zainu-l-'Ābidin. The coin precisely resembles other pieces which have been attributed to the founder of the dynasty, who reigned a century earlier than 842; these other pieces appear to be defective as regards date. It follows that silver coins bearing the name Shams should be regarded, in the absence of evidence to the contrary, as issues of Shams Shāh II. In the present state of our knowledge no coins are known earlier than those of Sikandar Shāh.

The total number of gold coins is now about a score; of these, eleven are in the British Museum. Stanley Lane-Poole in 1885 did not know of any; Mr. Rodgers in 1891 catalogued one, a piece of Yūsuf Shāh which is still unique. In 1907 Mr. Nelson Wright remarked that the gold coins were exceedingly scarce; they were absent from the Indian Museum Collection. The splendid White King Cabinet contained one specimen. All the issues known to me are illustrated on Plate **XXI**. They were struck to a standard of about 175 grains. Every obverse presents the Kalima in a circle; the

reverse contains the royal name and titles. There is a remarkable diversity of reverse legend. Some pieces, like the copper coins, may be identified by the line with centre knot which bisects the reverse. All were struck at the capital Srinagar, called Kashmir on the coins. The mint name is attended on the earlier pieces by an honorific epithet *Dāru-s-saltānat*, Seat of the Sultanate; the combination دار السلطنة كشمير is associated with a rhyming motto صينت عن التدمير "May it be preserved from destruction". The word *tadmīr* is followed by what looks like a round punctuation mark. This pious ejaculation for the salvation of Kashmir concludes the *Ta'rīkh-i-Rashīdī* (*op. cit.*, p. 149). The title "Seat of the Sultanate" was revived on a solitary Kashmir gold piece of Taimūr Shāh Durrānī.

ZAINU-L-'ĀBIDĪN.

1.	<i>Obv.</i>	<i>Rev.</i>
	In circle the Kalima, the Muhammadan profession of faith.	نائب امير المؤمنين قطب الدنيا و الدين
	<i>Marginal legend :</i> هذا الدينار فى دار السلطنة كشمير صينت عن التدمير سنة	ابو المجاهد العادل زين العابدين السلطان
	(sic) ٨٥١١	

N. 8. Wt. 172.5. [Pl. XXI. 1.] B.M.

The reverse of the British Museum coin, the only one I have seen, is by no means clear; the word '*ādīl*' may be *ghāzī*. A second specimen was in the Da Cunha Collection sold at Sotheby's in 1889; it was the only piece which realized an outstanding price.

HAIDAR SHĀH.

2.	<i>Obv.</i>	<i>Rev.</i>
As on 1, but date ٨٧٤.	<i>Above:</i>	نائب خليفة الرحمان
	<i>Middle:</i>	?
	<i>Below:</i>	السلطان حيدر شاه

A. .85. Wt. 171.0. [Pl. XXI. 2.] B.M.

The reverse legend will not be deciphered till other specimens are forthcoming.

HASAN SHĀH.

3.	<i>Obv.</i>	<i>Rev.</i>
As on 1, but date ٨٧٦.		Double line and knot.
	<i>Above:</i>	نگین ملک خاتیم سلیمان
	<i>Below:</i>	حسن شاه ابن حيدر شاه سلطان

A. .9. Wt. 174.0. [Pl. XXI. 3.] B.M.

4. As 3.

A. .9. Wt. 173.0. [Pl. XXI. 4.] B.M.

Some half dozen specimens of this interesting coin are known; all bear the date 876. No. 3 was in my Cabinet, Dr. White King had one, and another is at Berlin. The coin is called the signet of the kingdom, Solomon's seal; Hasan Shāh is the son of Haidar Shāh. Just outside Srinagar is the celebrated hill called

Takht-i Sulaimān (W. R. Lawrence, *The Valley of Kashmir*, London, 1895. P. 297).

MUHAMMAD SHĀH.

5.	<i>Obv.</i>	<i>Rev.</i>
	As on 1, but marginal legend is cut and date cannot be read.	سکه مهر محمد ... دولت سلطان <hr/> <hr/> کشمیر

Av. [Pl. XXI. 5.] Patna Museum.

This unique coin is probably an issue of Muḥammad Shāh; it belonged to Mr. C. J. Brown.

FATH SHĀH.

6.	<i>Obv.</i>	<i>Rev.</i>
	As on 1; date uncertain.	کر که لت و سب د مملکت مهر <hr/> <hr/> سکه فتح شاه سب کشمیر

Av. [Pl. XXI. 6.] Berlin.

7. As 6, but marginal obverse legend is that of 1, including the blundered date ۸۵۱۱.

Av. 9. Wt. 172.0. [Pl. XXI. 7.] B.M.

Coin 6 is in the Kaiser Friedrich Museum, Berlin (from the Guthrie Collection); No. 7 is in the British Museum, which possesses a third specimen (from my

own Cabinet). The reverse legend as shown is the result of comparing all three coins. We again have the words *sikka*, *muhr*, and *daulat* as on Coin 5. At the top right may be some such word as *kubr* meaning pride, splendour. The isolated characters which may be ست, occurring above and below the double line, suggest the possibility of a Persian couplet something like:—

Kubr i mamlakat kih muhr i daulat ast
Sikka i Fath Shāh [sultān] i Kashmīr ast.

HUMĀYŪN.

8.	Obv.	Rev.
	Kalima in circle ; in margin names of the four Imāms with their attributes.	Above : <div>خلد الله تعالى ملكه</div>
	بعلم علی : بصديق ابی بکر :	Below : <div>محمد همايون بادشاه ضرب کشمير</div>
	بعدل عمر : بحیای عثمان	Between : Double line, or possibly غازه.

A. .75. Wt. 174.0. [Pl. XXI. 8.] B.M.

This gold coin of Humāyūn is unique ; it inaugurates a new type.

IBRĀHĪM SHĀH.

9.	Obv.	Rev.
	Kalima in circle ; marginal legend much as no. 5, but illegible.	Double line and knot.
		Above : <div>ابراهيم سلطان</div>
		Below : <div>..... اعظم</div>

A. .75. Wt. 165. [Pl. XXI. 9.] B.M.

This is a gold coin of Ibrāhīm Shāh in the British

Museum; another specimen belonged to Mr. C. J. Brown and is now in the Patna Museum, India.

MUBĀRAK SHĀH.

10. *Obv.**Rev.*

As 8.

Above : As 8.*Below* :

علا الدين محمد مبارك شاه
ضرب کشمیر

Between : Possibly حسینی

N. 75. Wt. 175.0. [Pl. XXI. 10.] B.M.

This new and unique gold coin bearing the name of 'Alāu-d-dīn Mubārak Shāh came to the British Museum with my Cabinet. The work *Gulzār i Kashmīr* states that Yūsuf Shāh was driven from the throne by Sultan Sayyid Mubārak Khān in 1580 A.D. The *Nāma-i Shāhān-i Kashmīr* gives the names of 'Alī Shāh, Mubārak Shāh, Yūsuf Shāh and Ya'qūb Shāh as reigning between the years A.H. 986 and 994. The usurpation of Mubārak Khān is placed by Haig in the year A.H. 986, A.D. 1579 (*Op. cit.*, p. 463). He was not a Chakk. The above coin gives us his *laqab* 'Alāu-d-dīn. The name should be added to the dynastic list.

YŪSUF SHĀH.

11. *Obv.**Rev.*

As 8.

Above : As 8.*Below* :

محمد يوسف بادشاه ... ضرب
کشمیر

Between : As 8.

N. [Pl. XXI. 11.] Panjab Museum.

This piece of Yūsuf Shāh appears to be still unique. It was published by Mr. C. J. Rodgers on p. 59 of the *Catalogue of the Coins in the Government Museum, Lahore*. Calcutta, 1891. The words at the base of the reverse are not clear; Mr. Rodgers suggested نصرالدين.

12. The obverse marginal legend is like 9 and 5. On the reverse, above and below the double line and knot, is a legend containing دولت و مهر and other words which I cannot read.

A. .75. Wt. 174.2. [Pl. XXI. 12.] B.M.

13. There is also in the British Museum a gold coin of Fath Shāh, struck from reversed dies, that is to say, it can only be read in a mirror. The style is poor. The piece came from Sir A. Cunningham.

A. .85. Wt. 164. B.M.

R. B. WHITEHEAD.

XI.

THE AUREI AND SOLIDI OF THE ARRAS HOARD.

[SEE PLATES XXII-XXVI.]

ON account of the scattering and partial destruction of the valuable hoard of Roman Imperial gold coins and medallions discovered by workmen in a clay pit at Beaurains-lez-Arras in 1922,¹ its final reconstruction will be for ever impossible in an exact sense. The general composition of the hoard is, however, well known. If it is difficult to say how many medallions and coins were destroyed or are still unknown, a sufficiently large number has survived to enable us to determine that the hoarder began to lay aside the coins in the first years of Diocletian, and that the accumulated savings were buried in the earth in the earlier period of Constantine's reign. This much has been evident since the appearance of a representative lot of pieces from the find in the Ratto sale catalogue of April, 1923. In the present writer's article on four medallions from the hoard, the date of deposit, based upon a rapid examination of the material then at hand, was given as 309-312 and "possibly, . . . following the *end* of this period" (p. 31). Reasoning from the evidence at that time available, which indicated the presence of only "two or three solidi in the hoard", the writer was inclined to the date "rather toward

¹ References to previous articles on the hoard, and abbreviated citations of these and other sources, are given at the end.

the middle than the very end of the period", until a more complete picture of the hoard could be presented (p. 9).

Recently Sir Arthur Evans in publishing in this Journal the aurei acquired by himself and the British Museum has challenged the above dating. Basing his argument (1) on the supposition that the hoard contained no coins as late as 309, and (2) on the supposed inception of the solidus standard under Constantius Chlorus, he places the burial of the coins about 306. He excludes from the hoard the aurei of Maxentius with the Augustan title (facing head, Ratto 440, now Jameson, and another example in his own collection said to have come from the hoard) on the ground that his specimen "bears no traces of the silvering on the surface and will therefore not pass the 'acid test'". Both the Jameson and Evans specimens are, however, in mint condition and are of a type not known to Cohen, facts which confirm the definite attestation of their provenance. While it is true that on most of the hoard pieces there are dull silverish patches of discolouration due to the chemical reaction of the gold to the aluminium in the clay soil in which they were buried, not all of the coins are thus discoloured. Such pieces may have been in the centre of the pot.

Evans disposes of the medallion of Constantine as Augustus, and its unit, with reverse, *principi iuventutis*, dated by the writer as not earlier than 309 because of its solidus weight, by attributing these issues to the year of the assumption of the Augustan title by Constantine in March, 307, and suggests that this title may have been conferred upon Constantine even earlier in his own domain. The reply to this will be found just

below in the discussion of the solidus standard. As to the all-important solidus of Constantine, with reverse *s. p. q. r. optimo principi*, which the writer published in 1926 and attested as from the hoard, and as furnishing the real point of departure for all considerations of date of deposit, this coin is also not conceded by Evans to belong to the hoard. Apart from the record kept by the dealer who sold this coin, the discolouration on it characteristic of the Arras hoard coins and the existence of a second example from the hoard now in the Brussels cabinet,² prove our contention. These two solidi, the aurei of Maxentius, a solidus of Licinius (not known to Evans nor to the writer in 1926) and three other solidi of Constantine were in the hoard.

Evans's most ingenious and brilliantly expounded theory regarding the introduction of the solidus standard by Constantius Chlorus, during the Second Tetrarchy, May 1, 305, to July 25, 306 (death of Chlorus), is certainly very revolutionary, and the proofs cited must be carefully considered. It is founded naturally on the weights of certain coins which seemed to Evans to be struck on the solidus standard, and to antedate Constantine or to belong to the very beginning of his rule. Passing over for the moment the question of the weights of certain multiples and divisions which Evans thinks are based on the solidus, let us take up the case of the units. First the Pembroke solidus of Constantius (Pl. XXII. 1) in the British Museum, reverse, *vict Constant Aug SMT* (Evans, p. 247) would appear at first sight to record the victory of Chlorus in Britain in 306.

² Evans, p. 274, note 102; see now also *Rer. Belge*, 1931, Pl. I. 19.

But curiously enough the style of this coin is clearly much later than that of the T-mint coins of the period of Constantius as Augustus, 305-306 (*J.R.S.*, 1932, Pl. II, 1-3), and the portrait, though bearded and designated *Constantius p f Aug* (not *Constantinus p f Aug*, as Maurice, ii, p. 219, Pl. VIII), suggests Constantine. Furthermore, the reverse die actually occurs in the series of commemorative issues struck by Constantine at the T-Mint, *Journ. Rom. Stud.*, 1932, Pl. III. 19 (according to Alföldi, struck about 315-317). That is to say, the Victory figure was used on two issues, one with the inscription, *Vict Constant Aug*, spaced about the type, coupled with an obverse of Constantius and his name, and the other with the same reverse inscription expanded to *Victoria Constantini Aug*, coupled with the obverse of Constantine. This is obvious both on account of the identity of die of the Victory figure on both reverses, and of the otherwise unusual spacing of the shorter inscription on Constantius' coin. The details of the lettering on both coins prove that both reverses emanate from one die. Thus the later style of Constantius' portrait and of the reverse figure is now understandable since the coin is really a posthumous issue struck by Constantine. Secondly, Constantine's commemorative issue for his father, *Divus Constantius*, reverse, *consecratio*, PTR,³ would naturally be ascribed to 306-307, and Maurice thought that no coins with pagan consecration were struck later than this by Constantine. The weight, 4.50 grm., gives ground for Evans's claim that this is indeed a solidus, and if so, it would be the first coin on the new standard. As far

³ Evans, p. 247; Maurice, i, Pl. XXII. 8.

as our argument is concerned, it is a matter of no moment, since the dating of the hoard is not conditioned by the date of the introduction of the solidus standard. But in the light of the numerous irregularities in weight of aurei under Diocletian,⁴ we should hesitate to regard as a solidus this single example which may logically be dated soon after July, 306. Thirdly, the *felicitas reipublicae* solidus of Constantine by PTR, is undoubtedly an issue of Constantine's later period, after 313, as Maurice after some hesitation⁵ finally concluded in his analysis of the date. Fourthly, the coin of Maxentius as Augustus, reverse, *Herculi comiti Augg nn*, SMT, 4-425 grm., Berlin,⁶ which Evans dates in 306-307, and which cannot be later than April, 308, since a parallel exists for Constantine⁷ showing that the issue was struck when the two emperors were on terms of friendship, is not a solidus at all. It is an aureus which has been pierced and plugged, losing thereby about a gramme in weight. A solidus issued by Maxentius would certainly be an anomaly.⁸

Since then, no authentic instances of solidi struck by

⁴ Pink, p. 57.

⁵ Maurice, i, p. 391; wts. 4-92 grm., Vienna; 4-40 grm., Copenhagen.

⁶ Maurice, ii, p. 230, Pl. IX. 1.

⁷ *Journ. Rom. Stud.*, 1932 (xxii), Pl. II. 4, Milan. Maurice conjectured the existence of an analogous piece for Herculus, and this is perhaps C. 230.

⁸ The Berlin aureus of Maxentius, apparently unique, is an extraordinarily interesting coin, dating from February or March 307, alliance with Constantine. As the style of the portrait follows that of our aureus of Galerius, no. 118, struck in Rome previous to October 28, 306, rather than Maxentius' true portrait on his earliest issues before February 307, cf. no. 138, it becomes certain that the old die of Galerius was sent to the T-mint as a model for Maxentius' first gold issues there.

Constantius have been established, and it is doubtful if any were issued by Constantine before 309 or 310, it is hardly necessary to analyse the multiples and divisions which Evans considers to be based on the solidus unit. Suffice it to say that the medallions of Constantius weighing about 21.00 grm. may equally be *quaterniones* of the aureus system as *quiniones* of the solidus system— 4×5.40 or 5×4.40 , the result is about the same. Thus the medallion weighing 21.35 grm. published by the writer as a *quinio* should have been, as Evans correctly says, p. 241, classed as a *quaternio*, unless, of course, we accept his solidus theory.

Another point stressed by Evans in urging an earlier date for the burial of the hoard is that the issues of about 304 with the busts of the Conservatores, Jupiter, Hercules, Mars and Sol (Evans, nos. 41–47), must be the latest coins because of their brilliant mint state (p. 271), and because “they are all of the characteristic compact small module” (p. 269). The “Conservatores” group is not by any means the latest series in the hoard as we shall see, nor are they of the small module class of aurei which just precede the solidi at Treves. As we have shown that the hoard did contain several solidi and that there is no evidence to lead us to believe that solidi were issued before 309, the date of deposit remains practically what was first suggested by the writer, though further research makes it possible to define the year much more precisely.

Before proceeding to the coins, a list of the number of medallions so far known is desirable to bring our material on this part of the hoard up to date, although it is not possible to include them in this paper. In the order of publication they are as follows: nine, the

first known surviving pieces, *Aréthuse*, 1924; four, in American collections, *Num. Notes*, 1926; one, Evans, *Num. Chron.*, 1930, p. 232, Pl. XVI. 5; one, Beistegui Coll., "Medallion of the Second Tetrarchy", *Gaz. des Beaux-Arts*, July, 1932, totalling fifteen. Additional specimens stated on excellent authority to be in existence are: two, in the collection of the late Virgil Brand, Chicago, a *denio*, weighing 53.40 grm., obverse, *imp Maximianus p f aug cos VII*, Bust of Hercules l. laureate in imperial mantle, holding eagle-tipped sceptre in r., reverse, *Herculi conservatori Augg et Caess nn*, PTR, Hercules standing facing r., r. resting on club, apples in l., lion's skin on l. arm—a piece corresponding, except for a slight variation in the obverse inscription, to the *quinio* in the original nine published in *Aréthuse*, and hence the double of the latter, (2) a *quinio* weighing 25.50 grm., *imp Maximianus pius fel aug*, bust laureate and draped r., cuirass visible on r. shoulder; reverse with same inscription, Hercules standing facing r., r. hand on club, in outstretched l., a bow, lion's skin over l. arm, arrows in quiver visible over shoulder, PTR—a multiple of the very common aureus of the hoard, no. 102; two more medallions with the *Britannia* reverse, one of them, a Galerius, the other, a Diocletian, are said to be in European hands. Besides these nineteen well-attested examples, two others have been mentioned as being in private hands in Belgium, but of these no details are forthcoming.

As to the number of medallions of very unusual size, perhaps 100-aurei pieces, which were destroyed, there is a well-founded rumour to the effect that there were two. The story goes that some large pieces and a gold

wreath and an imperial mantle in gold (!) met the drastic treatment of being ironed out on a railroad track, where the owners placed them purposely after being advised by a Ghent antiquity dealer, since dead, that the whole find consisted of forgeries.

We may note here that the second lot of aurei dating from the middle of the second century to the beginning of the third, or roughly from the Antonines to Caracalla, some of which were mounted and had formed part of a necklace, are not included in our discussion. These coins were presumably inherited by the hoarder and preserved as bullion or jewellery, and were not collected by him in his lifetime.

Conservative estimate places the original number of the gold coins in the hoard proper as about three hundred. Other finds, such as the Karnak and Fayum, contained thousands of imperial aurei, but no previous hoard has been unearthed which covers precisely our period. New types in great abundance have become known, particularly from the Treves mint. Also two new aurei of Carausius,—not “Carausius in the name of his ‘brothers’” (Evans, p. 251),—are among the remarkable new pieces discovered.

At first it was the writer's intention to publish only the Arras coins acquired by Mr. E. T. Newell as a supplement to those which Evans described in this Journal in 1930. But as there was not then, two years ago, a chronological and geographical synthesis of gold coins of the period, Maurice's treatise not beginning before 305, and the works of Col. Voetter treating the gold only incidentally, it was decided to include all of the Arras material as a foundation for such an arrangement. Meantime, in 1931, Dr. Karl Pink's corpus of

the gold of the Diocletianic period appeared in the *Numismatische Zeitschrift*, 1931. This excellent work, however, carries up only to 305, and could not be amply illustrated. Nor do we find ourselves in entire agreement with all the details of his chronology and mint attributions. Again, the Newell coins, apart from the two medallions published in 1926, were not examined for this corpus.

In 1925, twenty-nine aurei, one of them a Faustina, were purchased by Mr. Newell together with the medallion of the First Tetrarchy.⁹ More aurei, a few solidi, and the medallion of the Caesars¹⁰ were obtained by Mr. Newell in 1923-1926 and later, and four by Mrs. Newell, directly from European dealers or indirectly through an American dealer, until the total number of specimens in the Newell collections is now fifty-six coins and two medallions. With these coins there are here listed all of the coins published by Evans, the coins in the Ratto catalogue which really belonged to the hoard, and those that passed through Mr. Schulman's hands, identified by him from his books and sale catalogues; also, a few others in sale catalogues, either attested by dealers or regarded by the writer as from the hoard,¹¹ and finally two new specimens acquired by Sir Arthur Evans in 1932 which he most generously has allowed the writer to publish (nos. 31 and 142).

In the list which follows, the coins are arranged in

⁹ *Num. Notes*, Pl. IV.

¹⁰ *Ib.*, Pl. I. These two pieces in the Newell Coll. were issued in 293.

¹¹ As for example, nos. 1478-9, 1482, and 1485 from the Haeblerlin Collection sold by A. Cahn, May 30, 1932.

chronological order, not primarily according to rulers or mints. In general, the only very worn coins are those at the beginning of Diocletian's reign, while those toward the end of the hoard are the most brilliantly preserved. Yet specimens fresh from the mint occur early in the period and coins showing a fair amount of wear are scattered about in the group, but on the whole, those after 305 show almost no wear. An exception to this is presented by two coins of Maxentius as Caesar which show considerable wear—a circumstance which by itself is sufficient proof that the hoard was not buried in 306–307.


In the following list of coins the specimen actually illustrated is marked with an asterisk.

LIST OF COINS.

Group I. Coins with bust and long inscription, with or without city-marks.

DIOCLETIANUS. (a) *Sole reign.*

1. *Obv.* IMP CC VAL DIOCLETIANVS PF AVG
Bust r., laureate and draped, seen from the rear.

Rev. VICTORIA AVG Victory standing l., wreath
in raised r., palm over l. shoulder.  Lug-
dunum. Cohen 465.

A aureus, 19 mm., *4.84 grm. Evans Coll., *Num.*
Chron. 1. [Pl. XXII. 2.]


No. 1 belongs to the earliest aurei class at Lugdunum. Its date, which cannot be before 285 when Italy and the West first came into Diocletian's possession, is 285–286.

2. *Obv.* Same inscription, bust r., laureate and draped.

Rev. VICTORIA AVG Victory advancing r., wreath in raised r., palm over l. shoulder; \odot (= 70) in r. field. SMA Antioch. C. 469.

A aureus, 19 mm. Ratto 389.

3. *Obv.* Similar to no. 1.

Rev. ROMAE AETERNAE Roma helmeted and draped, seated l. on throne without back, l. on upright sceptre, r. holding Victory on globe; behind, oval shield.  Cyzicus. C. 431.

A aureus, 19 mm., 4.53 grm. Schulman Cat. Dec. 12, 1926, 301 = Naville Cat. viii. 1446.

Nos. 2 and 3, struck in the East on the 70 to the lb. standard, date from 284-286.

(b) *Joint issues with Maximianus.*

4. *Obv.* Similar.

Rev. FATIS VICTRICIBVS Three Fates standing, each holding a cornucopiae on l. arm, the two figures at l. holding a rudder between them, figure on r. also holds a rudder. SC Cyzicus. C. 57.

A aureus, 21 mm. R. 377.

5. *Obv.* Similar without PF

Rev. Similar. SC Cyzicus. C. 58.

A aurei, 20 mm. (1) R. 378; (2) *5.30 grm. Evans Coll. (*Num. Chron.* 2); (3) Glendining, March, 1931, 1221. [Pl. XXII. 3.]

Aurei of this type were formerly assigned to the mint of Siscia to which Evans attributes them, but are now given to Cyzicus by P. H. Webb in the *Num. Chron.* 1929, p. 206.

6. *Obv.* Similar.

Rev. IOVI CONSERVATORI Jupiter standing facing l., thunderbolt in r., l. on long sceptre. SC Cyzicus. C. —.

A aureus, 20 mm. R. 383.

MAXIMIANUS HERCULIUS.

7. *Obv.* IMP C M A MAXIMIANVS AVG Bust r., laureate and draped.

Rev. VIRTVTI HERCVLIS Hercules standing facing r., supported under l. arm by club placed on rocks, r. hand on hip, lion's skin hanging from l. arm. SC Cyzicus. C. 663.

A aureus, 21 mm. R. 414.

Nos. 6 and 7, parallel pieces, struck on the 60 to the lb. standard, were issued in 286.

8. *Obv.* IMP C M AVR VAL MAXIMIANVS AVG Bust r., radiate and cuirassed.

Rev. IOVI CONSERVAT AVGG Jupiter standing l., as usual. SMT Ticinum. C. 346.

A aureus, 23 mm., *4.74 grm. Brit. Mus., Evans 3 (inscription inaccurate, and specimen is *fleur de coin*). [Pl. XXII. 4.]

Evans thought this piece might be of the 70 to the lb. standard, but this is doubtful, since many recorded weights of this type, for which a parallel of Diocletian is known, C. 212 (corrected), are of 5.00 grm. or more. It is one of the earliest known issues of Ticinum of about 286-288 at which time the heavier standard came into use. Compare the Brit. Mus. specimen, Sully Find near Cardiff, 1900, 5.20 grm. The corresponding type at Rome has no mint signature, cf. the B.M. specimen, Sully Find, 5.61 grm.

9. *Obv.* IMP CC VAL DIOCLETIANVS PF AVG
Bust r., radiate and cuirassed, larger module.

Rev. IOVI CONSERVAT AVGG Jupiter standing
l., as usual. $\frac{1}{-}$ Rome. C. 217.

A aurei, 23 mm. (1) R. 380; (2) *A. H. Baldwin;
(3) Spink & Son. [Pl. XXII. 4.]

10. *Obv.* Similar, but bust laureate and cuirassed, and smaller flan.

Rev. Similar. $\frac{1}{-}$ Rome. C. 216.

A aureus, 21 mm. R. 379.

Group II. Transitional style with head instead of bust, and shorter inscription; no city-marks except *Londinium*.

MAXIMIANVS HERCULIUS.

11. *Obv.* MAXIMIANVS AVGVSTVS Head l., laureate.

Rev. ADVENTVS AVGVSTORVM Diocletian
and Hercules in military dress on horseback,
riding to greet each other with uplifted r. arms,
sceptre in l. $\frac{1}{-}$ Rome. C. — [but cf. 7 (*A*)
and 8 (head r.)].

A aureus, 20 mm., *6.09 grm. Newell.
[Pl. XXII. 5.]

This aureus and the parallel coin for Diocletian, head to r., C. 9, commemorate a meeting of Diocletian and Maximian, either that of the winter of 288-289, or the one in Milan in 290. Pink assigns this *adventus* type to 287, associating it with other issues which, he believes, were struck at Rome in 287, and refer to this event. His first example, aureus of Diocletian on horseback, *cos III*, 287-289, mint of Rome, has no

exact parallel for Maximian for the year 287, i.e. with *cos*, the earliest known piece being *cos II*,¹² 288-289, not recorded by Pink. Such a coin is to be presumed, but the portraits of *cos II* and *cos III* seem earlier than those of the *adventus Augustorum* coins, and the interpretation of the former as "arrival" rather than consular types is open to doubt. While an emperor on horseback is a conventional "arrival" type exemplified on the gold medallion of Aurelian, *adventus Aug*,¹³ and the splendid *denio* of Ticinum commemorating the meeting of Constantine and Licinius at Milan in 313, *felix adventus Augg nn*, SMT, emperor on horseback l.,¹⁴ still such types without *adventus* and only consular dates can hardly be interpreted as "arrival" types.¹⁵ Nor do we concede that the *denio* in Florence and *quinio* in Berlin with confronting half-figures of Diocletian and Maximian, *impp Diocletiano et Maximiano Augg*; reverse, emperors in an elephant-quadrige, *impp Diocletiano III et Maximiano ccss*,¹⁶ refer to a meeting. For the emperors in an elephant-quadrige is a type which signifies either the *processus consularis* or a triumph, and the reverse inscription on these medallions indicates that the assumption of the consulate was the occasion for their issue. Moreover, though the year of issue is 287, the place of issue was not Rome but Cyzicus

¹² Caruso Cat., Canessa, 1923, 521. At Cyzicus also this type with *cos II* was employed, and this indicates pretty clearly that the emperor-riding type has no connexion with our *adventus* issue.

¹³ C. 2, Naville, iii, 1505.

¹⁴ Maurice, ii, p. 239, de Beistegui Collection.

¹⁵ Compare E. Stein's remarks on similar misinterpretations of the horseman types in Alexandrian issues, *Geschichte des spät-röm. Reiches*, i, p. 98. 2.

¹⁶ Gneecchi, *I Medaglioni Romani*, i, Pl. 5. 1, 2, cf. Lederer, *Num. Zeit*, 1928, Pl. III. 1.

as the style of the portraits clearly demonstrates. These two consular medallions of Cyzicus then can have no connexion with our *adventus* coin. As to the Roman medallion of Diocletian and Maximian, *Iovio et Herculio*, SMVR, the two emperors sacrificing at a tripod with figures of the protecting gods above, this also does not imply a meeting, and we would assign it to Diocletian's Quinquennalia in 288 or 289 because of the reverse type characteristic of the jubilee of the reign. At any rate this undated medallion of Rome cannot be given to 287 on the ground that it is one of a group of gold medallions issued at Rome for the same occasion, i.e. a meeting of Diocletian and Maximian, for, as we have shown, the *denio* and *quinio* of this supposed group, though belonging to 287, are not from the mint of Rome.

Our aureus, therefore, contrary to Pink, does not necessarily belong to 287. In style it is closer to the aureus issued by Carausius, here no. 12, with Maximian's name and portrait, which for historical reasons cannot be earlier than the end of 289, or 290. Hence, we should prefer to attribute it to the congress of the emperors at Milan, in *Mediolanensi palatio* (*Incerti Paneg.* III. xi, delivered in October, 290), at which presumably they discussed and regulated their respective positions and mutual relations in the empire, though nothing is said by the panegyrist directly implying that this was the purpose or outcome of the conference. But from the emphasis placed upon the harmonious equality of the emperors in the vivid and lengthy description of their appearance together before the populace,¹⁷ and

¹⁷ III. xi. ut vero limine egressi per mediam urbem simul vehebamini, tecta ipsa se, ut audio, paene commoverunt, omnibus

upon their frequent conversations,¹⁸ we may infer that this congress, for which the emperors are said to have arrived from East and West just as in the second Panegyric, was the more important of the two, if there really were two at about this time, and that the affairs of the new dual government were there settled.

If Seeck was right in thinking that both Panegyrics refer to but one meeting, and that this took place in Milan in the winter of 288-289, then our coin struck in Rome would belong to that period. But it seems justifiable to assume two meetings because of the representations on the lead proof for a gold medallion, reverse only, struck at Lugdunum in 287 or 288, which correspond exactly to the passage in *Inc. Paneg.* II. ix, describing a meeting of Diocletian and Maximian and a military victory of Maximian beyond the Rhine (*N. C.*, 1930, p. 237). In the upper register, Diocletian is seated on the left as an onlooker, while Maximian on the right is distributing largess to a crowd of soldiers and civilians. There would be no point in adding the figure of Diocletian if he were not actually present, since this is not one of the purely conventional types of parallel figures like the emperors sacrificing at a tripod, or the double busts, or two emperors in a quadriga, which do not imply the joint presence of the emperors.

viris feminis parvulis senibus aut per fores in publicum proruentes aut per superiora aedium limina imminentibus. Clamare omnis prae gaudio iam sine metu vestri et palam manu demonstrare: "vides Diocletianum? Maximianum vides? vides ambos? ut pariter sunt! quam iunctim sedent! quam concorditer colloquuntur! quam cito transeunt!"

¹⁸ III. xii. cotidiana vestra colloquia, coniunctas in omni sermone dexteris, ioca seriaque communicata, obtutu mutuo transacta convivia.

If the event referred to Maximian only, he would have been shown alone. He is, however, the principal figure, and in the lower register he is seen victoriously recrossing the Rhine on a bridge leading from a castellum to Moguntiacum (Mainz). This latter design relates to his expedition into Germania in 287.

For in the Panegyric the description of the meeting accompanied by a reference to *liberalitas* follows immediately the account of the achievements of both rulers in Germany, Diocletian's pushing forward of the Roman *limes* in the section opposite Rhaetia and Maximian's deeds noted in a general phrase, *quicquid pro hisce terris feceras*, which goes back to the earlier mention of his *transgressio in Germaniam* in Chap. vii. From this extraordinarily close correspondence between the panegyrist's account and the scenes on the medallion, Pink's assumption that this lead medallion commemorates a meeting of Diocletian and Maximian previous to April 21, 289, date of the panegyric, is well founded. The numismatic evidence, we believe, does not definitely establish 287 as the year. However, it surely occurred after Diocletian's compact with the Persians since he is said to have exhibited the *dona Persica* while Maximian showed the *spolia Germanica*. This event is dated by our leading authorities, Seeck and Stein, in 288, so that we obtain a *terminus post quem* for the meeting.

The emperors met probably in Gaul, in view of the mint-place which was in all probability Lugdunum in Gaul. No other large gold issues are known from this mint thus early, and it ceased coining gold temporarily about 287. But since this trial piece, a model or proof in lead, was found in the Saône at Lyons,

no other conclusion is permissible than that the die was made there. The bearded and laureate heads of the seated emperors prove that the medallion is pre-Constantinian, and their identification as Diocletian and Maximian follows from the representation in the lower register. Both wear the nimbus, a symbol of august divinity of rare appearance on coins before Constantine's time, but known to have been in use at this time, from the same Panegyric.¹⁹ As there are no other instances of its employment for the Caesars during the Tetrarchy,²⁰ we cannot agree with Alföldi's suggestion that the seated figure on the right dispensing largesse is Constantius.²¹ Moreover, this does not take into account the limitation of date *ca.* 287, set by the mint of issue which Pink was the first to perceive. Nor can Constantius' check of the invasion of the Alamanni in the region of the sources of the Marne, victory at Langres in 298 (Stein's suggestion following Alföldi's later dating),²² have anything to do with a crossing of the Rhine, as this war was on the Gallic side. Consequently, the meeting noted in *Paneg.* II, pronounced April 21, 289, was a different one from that noted in *Paneg.* III, pronounced in October, 290, which was at Milan, *in medio Italiae gremio*,²³ and *in Mediolanensi palatio*.²⁴ Our *adventus aureus* and its companion are

¹⁹ II. iii. *trabeae vestrae triumphales et fasces consulares et sellae curules et haec obsequiorum stipatio et fulgor et illa lux divinum verticem claro orbe complectens vestrorum sunt ornamenta meritorum pulcherrima quidem et augustissima.*

²⁰ Evans, *Num. Chron.*, 1930, pp. 234, 236 f.

²¹ *Zeit. f. Num.*, xxxvi (1926), p. 167 f., Alföldi argues for a date after 296.

²² *Geschichte d. spät-röm. Reiches*, i, p. 117, n. 3.

²³ III. iv.

²⁴ III. xi.

more reasonably to be connected with the latter meeting because of their seemingly later style, and because an Italian city would have been the natural mint-place for coins commemorating a meeting at Milan.

CARAUSIUS. (a) *In the name of Maximianus.*

12. *Obv.* MAXIMIANVS PF AVG Head of Maximianus laureate l.

Rev. COMES AVGGG Minerva standing facing r., r. hand on upright spear, l. on shield on ground. M L Londinium. C. —.

A aureus, 20 mm., *5.61 grm. Newell.

[Pl. XXII. 6.]

This aureus issued by Carausius in the name of Maximianus and with reference to three emperors is exceptionally of the 60 to the lb. standard instead of the lighter British standard, from which it may be inferred that it was struck for circulation on the Continent.

(b) *In his own name.*

13. *Obv.* CARAVSIVS PF AVG Head r., laureate and cuirassed.

Rev. SALVS AVGGG Salus standing facing, head r., holding in her r. arm a serpent which she is feeding with an object (apple?) held in her l. M L Londinium. C. —.

A aureus, 20 mm., *4.24 grm. Newell.

[Pl. XXII. 7.]


This issue and the preceding with *Auggg* belong to the period, about 290-292, after peace had been concluded between the usurper, Carausius, and the rulers of the empire, Diocletian and Maximian, and before the rupture in 292 or 293 which caused Constantius to

attack Bononia-Gesoriacum (Boulogne) previously held by Carausius. Both are unique and unpublished. A count of the published aurei of this ruler gives sixteen specimens and fourteen varieties.

DIOCLETIANUS.

14. *Obv.* DIOCLETIANVS AVGVSTVS Head l., laureate.

Rev. CONSVL IIII PP PROCOS Emperor standing facing l., globe in r., sceptre in l.


 Cyzicus (cf. C. 46, note).

A aureus, 19 mm. R. 376.

The fourth consulate of Diocletian extended from 290 to 293.

15. *Obv.* Similar, but head r.

Rev. CONCORDIAE AVGG NN Emperors togate seated on curule chairs, each holding globe in r., crowned by a facing Victory above and

between them.  Cyzicus. C. —.

A aureus, 19 mm. R. 375.


Coins of this type were struck for all the members of the Tetrarchy, and are consequently of the year 293 or later.

Group III. Coins of a new style of about 293–294, without city-marks.

DIOCLETIANUS.

16. *Obv.* DIOCLETIANVS AVG Head r., laureate.

Rev. VIRTVS AVGG NN Emperor seated r. in military dress on throne, in r. a globe, in l. upright spear; behind, Victory standing r.,


palm over l., placing a wreath on emperor's head; before him, seated captive r. 
Cyzicus. C. —.

A aureus, 19 mm., *5.42 grm. Evans Coll. (*Num. Chron.* 1930, 7, xvii. 2). [Pl. XXII. 8.]

Two aurei of this mint of the same types of slightly more advanced style are illustrated in the *Num. Chron.* 1902, Pl. XIX. 5, and Naville Cat. xiii, Pl. 47, 1515. Diocletian only has this reverse, but the reverse inscription is used on a contemporary coin of Maximian, C. 613, armed emperor on horseback charging against a fallen enemy, Pink, ii. 44, which is therefore probably the complementary piece. The reference may be to the Second Sarmatian War, fought in 292 under the command of Diocletian, before the naming of the Caesars on March 1, 293.

CONSTANTIUS *as Caesar.*

17. *Obv.* CONSTANTIVS NOB C Head r., laureate.

Rev. FIDES MILITVM Fides standing facing, head r., supporting with r. an upright standard and holding another in l.  Cyzicus. C. —.


A aureus, 19 mm., *5.40 grm. Evans Coll. (*Num. Chron.* 19). [Pl. XXII. 9.]

This military type, which the style shows to be contemporary with no. 16, may refer to Constantius' preparation for the war against Britain after the murder of Carausius by Allectus in 293.

18. *Obv.* FLA VAL CONSTANTIVS NOB CAES Head r., laureate.

Rev. PROVIDENTIA DEORVM Providence seated l., resting l. on upright sceptre and holding

wand in r. pointing towards a globe at her feet.

 Ticinum. C. —.

A aureus, 19 mm., *5.45 gm. Brit. Mus.,
Evans 27. [Pl. XXII. 10.]

Group IV. Coins bearing chiefly Jupiter and Hercules types with city-marks of Rome, Treves, Ticinum, and Siscia.

DIOCLETIANUS.

19. *Obv.* DIOCLETIANVS PF AVG Head r., laureate.

Rev. IOVI FVLGERATORI Jupiter advancing l., looking back, drapery flying, in r. thunderbolt; behind him, giant on knees. PR Rome. C. 285.

A aureus, 19 mm. R. 385. Obverse die same as that of no. 22, *Iovi conservatori*.

HERCULIUS.

20. *Obv.* MAXIMIANVS P AVG Head l., laureate.

Rev. Similar, but Jupiter advancing r., head r. PTR Treviri. C. —.

A aureus, 18 mm., 5.40 gm. Evans Coll. (*Num. Chron.* 13).

CONSTANTIUS *as Caesar*.

21. *Obv.* CONSTANTIVS N C Head r., laureate.

Rev. Similar. PTR Treviri. C. 162.

A aureus, 18 mm., 5.35 gm. Vierordt Cat., June 17, 1924, 986. [Pl. XXII. 14.]

This coin, *Iovi fulgeratori*, PTR, shares an identical obverse die with a coin of Ticinum, *Iovi conservatori*, PT, Jupiter seated with eagle, Cat. P. d'Amécourt, 634, which proves that the two issues are synchronous and hence completely disproves Pink's recently enunciated

theory that Treves signed first with PT and then with TR and PTR. Pink is obliged to place the two coins in different periods, the PT in 293 and the PTR in 295-296. Incidentally we have here a borrowing between the two mints, probably by Treves from Ticinum, since the former opened only about 293, while in the latter gold was struck during the sole reign of Diocletian, or from 286. Our hoard offers another instance of the sharing of an obverse die by coins of these two mints, namely the aurei, *pietas Augg PTR*, no. 28, and *Iovi conservatori*, PT, no. 29, where the head is again that of Chlorus as Caesar, and the inscription, *Constantius n c*. Thus once more it is evident that the two signatures occur contemporaneously, not in sequence as Pink argues. There is further, the coin no. 42 of Herculus, *Maximianus P Aug*, reverse, *Herculi victori PT*, Hercules seated facing (Pink, ii. 31) which shares an obverse die with a *Iovi fulgeratori* reverse (Pink, ii. 35), but bearing the city-mark IAN, mint of Iantinum (cf. C. 376) recently discovered by Pink and identified by him with a city mentioned in Ptolemy ii, 11. 8, probably on the site of Meaux near Lutetia Parisiorum. As Iantinum was active only at this time, namely in 293, one would naturally infer that its obverse die was supplied by its neighbour, Treves, which is of course Pink's conclusion as he gives the PT signature to Treves. Thus the portrait die reached Iantinum ultimately from Ticinum but through Treves as an intermediary.²⁵

Not even the existence of this common obverse shared by PT and Iantinum persuades us that PT is Treves. There are too many considerations which weigh strongly

²⁵ Probably a die-cutter was sent from Ticinum to the more recently opened Gallic mints.

against this assumption, which is in any event based merely on a casual suggestion of Laffranchi²⁶ that the PT signature might belong to Treves, and that SMT was the true mark of Ticinum. Unfortunately for this theory, the PT and SMT signatures occur on synchronous issues, as Laffranchi himself noted in the case of two aurei of Constantine, *regnatori rei publicae*, of identical types and style.²⁷ But these, Laffranchi called exceptions. Several other examples will be familiar, *restitutor libertatis*,²⁸ for instance, and these later PT issues of Constantine can scarcely be claimed as of the Treves mint!

Again, our *Iovi conservatori* PTR coin no. 25, shares an obverse die with the *Herculi immortalis* TR reverse (Pink, ii. 32), both of which coins Pink is compelled to place in his fourth period of Treves coins, with the "changed signature", i.e. from PT to TR or PTR, dating them in 296-299. But the head of Hercules on these coins is distinctly early in character, reminiscent of Roman style. Note also the markedly different style on the one hand of these early aurei, *Herculi immortalis* TR and its twin, *Iovi conservatori* PTR, and on the other hand of the aurei of new and improved style, *comes Augg* TR (our nos. 72-74), and *securitas orbis* TR (Montagu Cat. xxv. 737), all of which Pink puts in one period, 296-299. The broad date, 296-300, is one which we had already independently reached for our *comes Augg* TR coins, and also for our *salus Augg* TR piece, no. 75, now for the first time published,

²⁶ *Riv. Ital. di Num.* 1910, p. 35.

²⁷ *Ibid.*, Pl. III. 28-30.

²⁸ *J.R.S.*, 1932, Pl. III. 4, 18. But there is no need to labour the point.

with which we had also associated the *securitas orbis* type. But the *Iovi conservatori* and *Herculi immortali* coins are in our opinion among the earliest issues of Treves, namely, about 293.

Finally, apart from all such inconsistencies of dating, it is pretty obvious that even the early SMT and PT gold has a distinctive style of its own, consonant with that of the silver and bronze of Ticinum and different from that of the PTR and TR gold.

In conclusion we would call attention to the almost total lack of aurei at Ticinum from 293 to 300, if the PT coins were to be transferred to Treves. Interlocking dies, and, above all, the inherent logic of associating all of the Jupiter and Hercules types of the same style from the western mints, Rome, Ticinum, Treves, Iantium, and Siscia in a chronologically indivisible group, show the weakness of Pink's theory, apart from the above points any one of which is good and sufficient in itself.

DIOCLETIANUS.

22. *Obv.* DIOCLETIANVS PF AVG Head r., laureate.

Rev. IOVI CONSERVATORI Jupiter seated l. on high-backed throne, thunderbolt in r., l. on upright sceptre. PR Rome. C. —.

A' aureus, 20 mm., *5.79 grm. Schulman Stock, 1931. [Pl. XXII. 11.]

The obverse die is the same as that of R. 385, *Iovi fulgeratori*, no. 19.

23. *Obv.* Same inscription, laureate, bust seen from rear draped.

Rev. Similar, but at feet eagle, head reverted, wreath in beak. PR Rome. C. —.

A' aureus, 20 mm. Schulman Cat., Dec. 16, 1926, 300.

The same reverse type is found at Ticinum, no. 29, and of the same period. Thus, Ticinum and Rome issue contemporaneously coins with the same reverse subject which does not occur at Treves. But as the obverse die of the Ticinum coin, no. 29, is identical with that of a Treves coin, no. 28, all these coins are synchronous issues. Apparently, the first signature used at Treves is PTR. This form of signature, *P(ercussa)*, followed by the mint name, was introduced with the new, or rather revived, custom of using the city-mark, in which Rome may have taken the lead.

24. *Obv.* Similar, but head r., laureate.

Rev. Similar, different die. PR Rome. C. —.

A aureus, 19 mm. Schulman Cat., March 17, 1924, 314.

HERCULIUS.

25. *Obv.* MAXIMIANVS AVG Head r., laureate.

Rev. Similar. PTR Treviri. C. 358.

A aureus, 18 mm., *4.98 gm. Brit. Mus., Evans 12, xvii. 6. [Pl. XXII. 12.]

DIOCLETIANUS.

26. *Obv.* DIOCLETIANVS P AVG Head r., laureate.

Rev. PIETAS AVGG Pietas standing facing, head r., holding a child in her arms, child standing at either side raising its hand towards Pietas. PTR Treviri. C. —.

A aureus, 18 mm., 5.35 gm. Brussels, *Rev. Belge*, 1931, Pl. I. 4.

HERCULIUS.

27. *Obv.* MAXIMIANVS P AVG Head r., laureate.

Rev. Similar. PTR Treviri. C. 464.

A aureus, 18 mm., 5.44 grm. Schulman Cat.,
Dec. 16, 1924, 304; Naville Cat. viii. 1457.

CONSTANTIUS as Caesar.

28. *Obv.* CONSTANTIVS N C Head r., laureate.

Rev. Same die. PTR Treviri. C. 215.

A aurei, 18 mm. (1) 5.00 grm. Evans Coll.,
Num. Chron. 24; (2) *5.39 grm. Brit. Mus.,
Evans 24. [Pl. XXII. 13.]

29. *Obv.* Same die.

Rev. IOVI CONSERVATORI Jupiter seated l.,
eagle. PT Ticinum. C. 156.

A aureus, 18 mm., *5.01 grm. Brit. Mus.,
Evans 23. [Pl. XXII. 15.]

HERCULIUS.

30. *Obv.* MAXIMIANVS PF AVG Head r., laureate.

Rev. VIRTVS AVGG Hercules nude, standing r.,
contending with the Nemean lion; at l. club
upright. PR Rome. C. 587.

A aureus, 19 mm. Schulman Cat., Dec. 16,
1926, 305.

Although as a rule the Hercules types at Rome are in the name of Maximian, an issue of Galerius, a quinarus, *Maximianus nob Caes* with the same reverse inscription, Hercules standing, r. on club, l. holding lion's skin, PR, Montagu Cat. 743, proves that the Roman types like the present come into the category of coins issued about 293. The following series, Hercules and stag, includes Constantius at Treves.

31. *Obv.* VIRTVS MAXIMIANI AVG Bust of Hercules laureate r., wearing cuirass with Gorgoneion, holding spear in r. and two spears and shield in l.

Rev. Similar, without club. PR Rome. Cf. C. 591.

A aureus, 19 mm., *5.56 grm. Evans, 1932.
[Pl. XXII. 16.]

32. *Obv.* MAXIMIANVS AVG Head r., laureate.

Rev. VIRTVS AVGG Hercules r., kneeling on the Cerynian stag which he seizes by its antlers.
TR Treviri. Cf. C. 596.

A aureus, 18 mm., 5.17 grm. R. 409 = Cahn Cat., May 30, 1932, 1482.

CONSTANTIUS as Caesar.

33. *Obv.* CONSTANTIVS N C Head r., laureate.

Rev. Similar. TR Treviri. C. 297.

A aureus. Schulman List.

HERCULIUS.

34. *Obv.* MAXIMIANVS PF AVG Bust r., laureate and cuirassed, seen from the rear.

Rev. Similar, but club covered by lion's skin upright in field. PR Rome. C. 595.

A aureus. 20 mm., *5.30 grm. Schulman Stock, 1931. [Pl. XXIII. 1.]

35. *Obv.* Similar, but head laureate r.

Rev. Similar, but no club or lion's skin. PR Rome. C. —.

A aureus, 19 mm., *5.19 grm. Newell.
[Pl. XXIII. 2.]

DIOCLETIANUS.

36. *Obv.* DIOCLETIANVS AVG Head r., laureate.

Rev. IOVI PROPUGNAT Jupiter advancing l., head r., thunderbolt in raised r.; on extended l. eagle with head reverted and wreath in beak. TR Treviri. C. —.

A aureus, 18 mm., 5.50 gm. Schulman Cat., May 10, 1926, 717 = Vierordt, June 17, 1924, 977.

Pink places our coin in 296-299 with *comes Augg*, *securitas orbis* (cf. above, under no. 21), but it belongs to that category just as little as the *Herculi immortalis* and *Iovi conservatori* types which he places there also, but which we showed to be earlier. As it shares an obverse die with a *virtus Augg* TR, Hercules and stag type, P. d'Amécourt 613, it is plain that its place is here.

HERCULIUS.

37. *Obv.* MAXIMIANVS PF AVG Head r., laureate.

Rev. HERCVLI PACIFERO Hercules standing facing l., holding a branch in raised r. and club upright in l., lion's skin hanging from l. arm. PR Rome. C. 271.

A aureus, 20 mm., *5.43 gm. Brit. Mus., Evans 11. [Pl. XXIII. 3.]

38. *Obv.* MAXIMIANVS PF AVG Bust r., laureate and cuirassed, seen from the rear.

Rev. HERCVLI VICTORI Similar. PR Rome. C. —.

A aureus, 19 mm. R. 404.

39. *Obv.* MAXIMIANVS AVGVSTVS Head r., laureate.

Rev. HERCVLI VICTORI Hercules seated on rock facing, head three-quarters r., arms crossed,

l. on upright club, r. holding lion's skin over l. knee; on r. quiver with arrows and bow upright. PR Rome. C. —.

A aureus, 19 mm., 5.20 grm. Evans Coll. (*Num. Chron.* 4).

40. *Obv.* MAXIMIANVS PF AVG Bust r., laureate and cuirassed.

Rev. Similar. PR Rome. C. 306.

A aureus, 19 mm. R. 405.

41. *Obv.* Same inscription, but head r., laureate.

Rev. Similar, head of Hercules in profile r. PR Rome. C. 305.

A aureus, 19 mm., *5.74 grm. Newell.
[Pl. XXIII. 4.]

42. *Obv.* MAXIMIANVS P AVG Head r., laureate.

Rev. Similar, head three-quarters r. PT Ticinum. C. —.

A aureus, 19 mm., *4.98 grm. Newell=Vierordt Cat., June 5, 1930, 605. [Pl. XXIII. 5.]

DIOCLETIANUS.

43. *Obv.* DIOCLETIANVS PF AVG Head r., laureate.

Rev. IOVI CONSERVAT Jupiter seated facing on high-backed throne, thunderbolt in r. resting on knee, l. on upright sceptre; eagle at l. PT Ticinum. C. 187.

A aureus, 19 mm., *5.59 grm. Newell.
[Pl. XXIII. 6.]

44. *Obv.* DIOCLETIANVS P AVG Similar.

Rev. Similar. PT Ticinum. C. —.

A aureus, 19 mm., 4.98 grm. Brussels, *Rev. Belge*, 1931, i. 1. Nos. 42 and 44 are parallels.

GALERIUS as Caesar.

45. *Obv.* D N MAXIMIANO CAES Head r., laureate.

Rev. PRINCIPI IVVENTVTIS Galerius in military dress standing r., holding spear in r. transversely, globe in l. PROM Rome. C. — and Pink —.

A aureus, 18 mm., *5.94 grm. Newell. [Pl. XXIII. 8.] A parallel for Constantius is known, Brit. Mus., Cracherode, C. 232, and there is also a medallion of 12.81 grm. with the same reverse, Brit. Mus., Blacas, *Fl Val Constantius nob Caes*, PROM, bust slightly draped, radiate r. [Pl. XXIII. 7.]

CONSTANTIUS as Caesar.

46. *Obv.* D N CONSTANTIO CAES Head r., laureate.

Rev. PRINCIPI IVVENTVTIS Constantius in military dress, standing l., supporting with r. an upright military standard, l. resting on upright sceptre. PROM Rome. C. 233.

A aureus, 18 mm., *5.41 grm. Newell.
[Pl. XXIII. 9.]

This aureus is the unit of the *denio*, *Num. Notes*, Pl. I, struck to commemorate the accession of the Caesars in 293, the corresponding piece for Galerius being not no. 45, but C. 178, cf. *Num. Notes*, fig. 5, not in the hoard.

DIOCLETIANUS.

47. *Obv.* DIOCLETIANVS PF AVG Head r., laureate.

Rev. IOVI CONSERVAT AVGG Jupiter standing l., holding thunderbolt in r., resting l. on upright sceptre. PROM Rome. C. 221.

A aureus, 18 mm. R. 381.

HERCULIUS.

48. *Obv.* MAXIMIANVS PF AVG Bust of Hercules in lion's scalp r.

Rev. HERCVLI DEBELLAT Hercules standing l. raising club in r. to strike the Lernaean hydra attacking him and coiled about his legs, while he seizes with l. one of its heads. PROM Rome. C. 254.

A' aurei, 18 mm. (1) *5.79 gm. Newell = Schulman Cat., Dec. 16, 1926, 303; (2) 5.87 gm. Cahn Cat., May 30, 1932, 1479 = (?) R. 402; (3) R. 401; (4) R. 402. (1) and (2) same pair of dies, (3) different obverse and reverse dies. [Pl. XXIII. 10.]

49. *Obv.* Similar. Head r., laureate.

Rev. Similar, but type to r. PROM Rome. C. —.

A' aureus, 5.29 gm. Cahn Cat., May 30, 1932, 1478.

50. *Obv.* MAXIMIANVS PF AVG Head r., laureate.

Rev. Similar, but type l. PT Ticinum. C. —.

A' aureus, 18 mm. R. 400.

51. *Obv.* Similar, but P AVG Head r., laureate.

Rev. Similar. PT Ticinum. C. 253.

A' aureus, 19 mm., *5.42 gm. Brit. Mus., Evans 10, xvii. 5. [Pl. XXIII. 11.]

52. *Obv.* MAXIMIANVS AVG Head r., laureate.

Rev. Similar. $\frac{|}{—}$ Siscia. C. 256.

A' aureus, 18 mm., 5.35 gm. Schulman Cat., Oct. 31, 1927 = Vierordt Cat., June 17, 1924, 980.

A parallel for Constantius, *Constantius nob C*, also without city-mark, is illustrated in *Num. Chron.* 1902, xix. 11.

53. *Obv.* Similar.

Rev. HERCVLI VICTORI Similar, but lion's skin hanging over back. *SIS Siscia. C. —. Cf. type of bronze medallion, *Herculi debellatori*, C. 258.

A' aureus, 19 mm., *5.05 grm. Schulman Stock, 1931 = Vierordt Cat., June 17, 1930, 604.

[Pl. XXIII. 12.]

CONSTANTIUS *as Caesar.*

54. *Obv.* CONSTANTIVS N C Head r., laureate.

Rev. VIRTVTI AVGG Hercules and hydra as on no. 48. TR Treviri. C. 323, corrected to Augg.

A' aureus, 19 mm., 5.43 grm. Brussels, *Rev. Belge*, 1931, Pl. I. 11.

GALERIUS *as Caesar.*

55. *Obv.* MAXIMIANVS N C Head r., laureate.

Rev. HERCVLI VICTORI Hercules standing facing, lion's skin over back, head l., holding a figure of Victory in r., leaning l. on upright club. TR Treviri. C. —.

A' aureus, 19 mm., 5.45 grm. Schulman Cat., June 17, 1924, 989.

The Ticinum mint struck this reverse for Herculus, *Num. Chron.*, 1902, xix. 6.

It is noteworthy that the heads on the early coins of Treves in Group IV are very inferior to those of the Ticinum mint.

Group V. *Providentia Augg* and *Virtus militum*, Rome. 296-299.

HERCULIUS.

56. *Obv.* MAXIMIANVS PF AVG Head r., laureate.

Rev. PROVIDENTIA AVGG City gate with three towers. PR Rome. C. 485.

A aurei, 18 mm. (1) 5.05 grm. The most worn coin of any in the hoard. Amer. Num. Soc.; (2) R. 408.

57. *Obv.* Similar.

Rev. VIRTVS MILITVM City gate. PR Rome. C. 626.

A aureus, 18 mm. R. 412.

DIOCLETIANUS.

58. *Obv.* DIOCLETIANVS PF AVG²⁹

Rev. Similar. PR Rome. C. 519.

A aureus, 18 mm. R. 390.

59. *Obv.* Similar.

Rev. Similar. PR Rome.

A aureus, 18 mm., *4.88 grm. Newell.

60. *Obv.* Similar.

Rev. Similar. PR Rome.

A aureus, 18 mm., *4.68 grm. Newell.

[Pl. XXIII. 13.]

GALERIUS *as Caesar*.

61. *Obv.* MAXIMIANVS CAES

Rev. Similar. PR Rome. C. 222.


A aurei, 18 mm. (1) R. 413; (2) 5.66 grm. Brit. Mus., Evans 34; (3) 5.26 grm. Newell; (4) 5.31 grm. Newell.

²⁹ From here on, head r. laureate is to be understood where the description is omitted.

Group. VI. Vota issues of Aquileia.

DIOCLETIANUS.


62. *Obv.* DIOCLETIANVS PF AVG

Rev. VOT XX AVGG within a wreath at base of
which is an eagle, facing.  Aquileia.
C. 540.

A aurei, 18 mm. (1) *5.50 grm. Newell; (2)
5.40 grm. Evans Coll., *Num. Chron.* 8, XVII. 3;
(3) R. 391. [Pl. XXIII. 14.]

HERCULIUS.

63. *Obv.* MAXIMIANVS PF AVG

Rev. Similar.  Aquileia. C. 685.

A aureus, 18 mm. R. 415.

These coins, first assigned to this mint by Pink, are dated by him in 296-299, the parallel pieces for the Caesars, C. 333 and 238, having VOT X CAESS. The *vota* would then be decidedly anticipated. Pink observes that the smaller size of the flan in comparison with that of the Vicennial anniversary issue, no. 98, precludes their being placed at any later date. On this question see further under nos. 109 and 116.

Group VII. Antioch 293-297.

HERCULIUS.

64. *Obv.* MAXIMIANVS AVGVSTVS

Rev. CONSVL IIII PP PROCOS Maximianus as consul standing l. in toga, globe in r., sceptre in l. SMA Ξ (= 60) *Antioch. C. 80.

A aurei, 19 mm. (1) R. 394; (2) 5.37 grm. Cahn Cat., May 30, 1902, 1477. Nos. 1 and 2, different obverse and reverse dies.

GALERIUS as Caesar.

65. *Obv.* MAXIMIANVS NOB CAES

Rev. IOVI CONS CAES Jupiter standing facing l.,
thunderbolt in r., resting l. on upright sceptre;
at feet, eagle. SMA Ξ (= 60) Antioch. C. 118.

A aureus, 20 mm. R. 426.

The above two coins are contemporary issues,
dating 293-297, *Herculi cons Caes*, being the
parallel for Constantius, C. 145.

Group VIII. 296-298.

HERCULIUS.

66. *Obv.* MAXIMIANVS AVG

Rev. VIRTVS ILLYRICI War-galley r. in which
are helmeted soldiers, above which is the
emperor (Constantius) on horseback galloping
r., holding spear downwards. TR Treviri.
C. 621.

A aurei, 19 mm. (1) *5.65 grm. Evans Coll.,
Num. Chron. 16, fig. 1 = R. 410; (2) R. 411;
(3) 5.73 grm. Brussels, *Rev. Belge*, 1931,
Pl. I. 9. (1) and (3) same obverse; all different
reverse dies; in (2) *five* soldiers with helmets
and round shields are discernible; similar to
no. 67. [Pl. XXIII. 15.]

CONSTANTIUS as Caesar.

67. *Obv.* CONSTANTIVS N C

Rev. Similar. TR Treviri. C. 307.

A aureus, 19 mm., *4.61 grm. Newell.
[Pl. XXIII. 16.]

GALERIUS as Caesar.

68. *Obv.* MAXIMIANVS N C

Rev. Similar, entirely different die, no soldiers in
galley. TR Treviri. C. —.

A aureus, 19 mm., *5.60 grm. Newell.
[Pl. XXIII. 17.]

This coin of Galerius completes the series for the four emperors, Diocletian's issue being C. 515, and was unknown before the Arras find and hence to Pink and Evans. These aurei, struck only at Treves, relate to the expedition of Constantius against Allectus in 296 (or spring of 297 according to Stein, p. 116), and are units of the celebrated London medallion³⁰ from our hoard. The inscription may be interpreted as *virtus (exercitus) Illyrici(ani)* and indicates that some of the forces in the victorious attack on London were recruited in Illyricum.

69. *Obv.* MAXIMIANVS CAES

Rev. FELIX ADVENT AVGG NN Africa standing facing, head l., coifed in the elephant's scalp, holding vexillum(?) in r. and elephant's tusk in l.; on r., at her feet, lion devouring a bull's head. P K Karthago. C. —.

A' aureus, 18 mm., 5-10 grm. Evans Coll., *Num. Chron.* 31, XVII. 14.

As a companion piece to this coin of Galerius, an aureus of Diocletian is known, C. 66; and the type occurs in silver with Constantius' head, C. 33; the hoard also contained a silver coin of the same type with Herculus' head, Evans, p. 266, note 91, and the reverse was struck in copper for Constantius, C. 35. All of these pieces were issued during the stay of Herculus in Carthage in the winter of 297-298. As the *Augg nn* implies that Diocletian was also present, he probably journeyed to meet Herculus at Carthage from Alexandria where in 296 or 297 he had been occupied with the suppression of the rebellion of

³⁰ *Aréthuse*, 1924, Pl. VIII, now in the Arras Museum. Alföldi was the first to point this out, *Zeit. f. Num.*, 1926, p. 172.

Domitius Domitianus. There is no record apart from these coins of this meeting between the emperors, the only ones known to history being those in Gaul and Milan in 288 and 290 (cf. coin no. 11), and the meeting in Rome for the Vicennial celebration of 303.

DIOCLETIANUS.

70. *Obv.* DIOCLETIANVS PF AVG

Rev. IOVI CONSERVATORI Jupiter standing facing, head l., thunderbolt in r., l. on sceptre; at feet, eagle; Ξ (= 60) in r. field. T·S· Thessalonica. C. 263.

A aureus, 20 mm., *5.41 grm. Newell=Schulman Cat., Dec. 16, 1926, 299. [Pl. XXIII. 18.]

HERCULIUS.

71. *Obv.* MAXIMIANVS PF AVG

Rev. HERCVLI VICTORI Hercules standing facing, head r., resting r. on upright club, holding apples in outstretched l., lion's skin over forearm; Σ in l. field. T·S· Thessalonica. C. —.

A aureus, 20 mm., *5.43 grm. Newell. [Pl. XXIII. 19.]

Group IX. New and improved style of Treves, 298–300.

DIOCLETIANUS.

72. *Obv.* DIOCLETIANVS AVG

Rev. COMES AVGG Mars, helmeted, standing facing r., head l., under an arch supported by two columns; r. resting on upright spear, round shield in l. T R Treviri. C. —.

A aureus, 19 mm., *4.91 grm. Brit. Mus., Evans 5, XVII. 1. [Pl. XXIV. 1.]

HERCULIUS.

73. *Obv.* MAXIMIANVS AVG*Rev.* Same die. C. —.*A* aureus, 19 mm., 5.25 grm. Brussels, *Rev. Belge*, 1931, Pl. I. 7.GALERIUS *as Caesar.*74. *Obv.* MAXIMIANVS N C*Rev.* Similar. T R Treviri. C. 12 (corrected).*A* aurei, 19 mm. (1) *5.95 grm. Newell = Schulman Cat., June 17, 1924, 988; (2) 5.59 grm. Brussels, *Rev. Belge*, 1931, Pl. I. 12. Same dies. [Pl. XXIV. 2.]

DIOCLETIANUS.

75. *Obv.* DIOCLETIANVS AVG*Rev.* SALVS AVGG Salus standing facing, head r., holding in her r. arm a serpent which she is feeding with an object (apple?) held in her l. T R Treviri. C. —, unpublished.*A* aureus, 19 mm., *5.11 grm. Newell. [Pl. XXIV. 3.]

HERCULIUS.

76. *Obv.* MAXIMIANVS AVG Die as no. 73.*Rev.* PACATOIRES GENTIVM Maximian in a quadriga facing, holding a laurel branch in r.; standing at r. a foot-soldier, helmeted, and holding in l. a parazonium. T R Treviri. C. —.*A* aureus, 19 mm., 5.07 grm. Brit. Mus., Evans 15 b, XVII. 8.

77. *Obv.* Similar, with PF

Rev. Similar. C. 424.

A aureus, 19 mm., 5.10 gm. T R Treviri.
Evans Coll., *Num. Chron.* 15 a.

78. *Obv.* Similar, but obverse die of later style, identical with no. 90. T R Treviri.

Rev. Same die as no. 76. T R Treviri. C. —.

A aureus, 19 mm., 5.15 gm. Schulman Cat.,
June 17, 1924, 981.

This coin, which may be identical with no. 77, a cast of which was not seen, is clearly a later striking in which the reverse die employed for no. 76 was used in a very worn condition.

CONSTANTIUS *as Caesar.*

79. *Obv.* CONSTANTIVS NOBIL C

Rev. Same die as no. 76. T R Treviri. C. and
Pink —, unpublished.

A aureus, 19 mm., *5.04 gm. Newell.
[Pl. XXIV. 4.]

80. *Obv.* CONSTANTIVS NOB C

Rev. HERCVLI AVGG Hercules standing l., resting
r. on upright club, lion's skin over l. arm.
T R Treviri. C. —.

A aureus, 19 mm., *5.43 gm. Brit. Mus.,
Evans 20. [Pl. XXIV. 5.]

81. *Obv.* Same die.

Rev. PAX AETERNA Pax standing l., holding
olive branch (?) in r., sceptre transversely in l.
T R Treviri. C. —.

A aureus, 19 mm., *5.55 gm. Evans Coll.,
Num. Chron. 25, fig. 6. [Pl. XXIV. 6.]

82. *Obv.* Similar.

Rev. VIRTVS HERCVLI CAESARIS Constantius
on horseback r., spear held in r. horizontally.
T R Treviri. C. 306.

A aurei, 19 mm. (1) 5.45 grm. Schulman Stock,
1931; (2) *Evans Coll., *Num. Chron.* 28, XVII.
12; (3) R. 424; (4) 5.45 grm. Cahn Cat.,
May 30, 1932, 1485 = (?) R. 424. All same
obverse and reverse dies. [Pl. XXIV. 7.]

GALERIUS as Caesar.

83. *Obv.* MAXIMIANVS NOB C

Rev. VIRTVS IOVI CAESARIS Similar. T R
Treviri. C. 215.

A aureus, 19 mm., 5.38 grm. Brussels, *Rev.*
Belge, 1931, Pl. I. 16.

Comes Augg, no. 72, is known for all emperors except Constantius for whom it may be presumed from C. 9 Æ, *comes Aug* [*sic*]. At Ticinum this inscription accompanies Minerva standing with spear and shield in a similar pose but not in a temple, on a coin of Constantius in the British Museum.³¹ From the style this might be a contemporary issue. *Pacatores gentium* is known only for Herculius and Constantius, the two co-rulers in the West. After the conquest of Britain in 296 or 297, the war against the Carpi in Pannonia, the suppression of the usurper, Domitianus, in Africa, and the termination of the Persian war in 299, the empire was at peace. The coin, *pax aeterna*, is fairly close to the style of nos. 82 and 83, and should be placed here rather than with Pink in the festival *conservatores* group. To this group of types reflecting a state of peace, belongs also the *securitas orbis* TR type, C. 456,

³¹ Cat. Montagu, Pl. XXVI. 761.

P. d'Amécourt 611.³² *Virtus Herculi Caesaris* is balanced by *virtus Iovi Caesaris* for Galerius, C. 215, and these issues also belong to a date just before the festival group. Because of the general peace, a pause ensues in the gold issues of most mints, Pink believes, and thus the gap in our Treves series from about 300–303 is explained. The mint pause also explains the linking of our *pacatores gentium* coin, no. 78, by a common obverse die to the later issue, no. 90.

Group X. Festival Issues—*Vota* and *Conservatores* types.

DIOCLETIANUS.

84. *Obv.* DIOCLETIANVS PF AVG

Rev. PRIMI XX IOVI AVG COS VIII P T R in
a wreath. Treviri. C. —.

A aurei, 18 mm. (1) 5.47 grm. Mrs. Newell;
(2) R. 388; (3) *4.99 grm. Newell; (4) 5.28
grm. Brussels, *Rev. Belge*, 1931, Pl. I. 6. All
same dies except obverse of (3). [Pl. XXIV. 8.]

85. *Obv.* Similar.

Rev. VOTIS XX SIC XXX in a wreath. $\frac{|}{—}$
Treviri. C. —.

A aurei, 18 mm. (1) *5.25 grm. Schulman
Stock, 1931; (2) R. 393. The obverse is from
the same die as no. 84 (3). [Pl. XXIV. 9.]

HERCULIUS.

86. *Obv.* MAXIMIANVS P AVG

Rev. VOT XX SIC XXX Similar. $\frac{|}{—}$ Treviri.
C. 689.


³² Same coin as Cat. Montagu, Pl. XXV. 737.

A aurei, 18 mm. (1) 5.18 grm. Schulman Stock, 1931 = Vierordt Cat., June 5, 1930, 608; (2) R. 416; (3) Glendining, March, 1931, 1223; (4) 5.24 grm. Brit. Mus., Evans 14, Pl. XVII. 7; (5) 5.53 grm. *Num. Chron.* 14; (6) 5.63 grm. Idem; (7) 5.55 grm. Cahn Cat., May 30, 1932, 1484 = (2) or (3) or (5) (?), all same coins(?). All coins examined from the same pair of dies.

These *vota* issues commemorate the Vicennial of Diocletian celebrated in Rome by the two emperors together at the festival lasting from Nov. 17 to Dec. 18, 303.

GALERIUS as Caesar.

87. *Obv.* MAXIMIANVS NOB C

Rev. SIC X SIC XX COS IIII in a wreath. 
Treviri. C. —.

A aureus, 19 mm., *5.00 grm. Brit. Mus., Evans 32, XVIII. 1. [Pl. XXIV. 10.]

The obverse is from the same die as no. 92 (1), bust of *Marti propugnatori*. No companion piece of Constantius has been found, though doubtless issued, and this coin is unique. The date is 303-304.

DIOCLETIANUS.

88. *Obv.* DIOCLETIANVS AVG

Rev. IOVI CONSERVATORI Laureate bust of Jupiter r. T R Treviri. C. 269.

A aurei, 19 mm. (1) *5.11 grm. Mrs. Newell; (2) R. 384; (3) Schulman Cat., March 17, 1924, 315; (4) 5.94 grm. Brussels, *Rev. Belge*, 1931, Pl. I. 3, all same obverse and reverse dies; (5) 5.20 grm. Evans Coll., *Num. Chron.* 42, XVIII. 9; (6) *5.26 grm. Newell, (5) and (6) same obverse die as (1) to (4) but different reverse; (7) 5.50 grm. Naville Cat. xii. 3013. [Pl. XXIV. 11, 12.]

This last specimen is included as a hoard piece because it appears with two other aurei of the *Conservatores* group in the Naville catalogue of 1926, and is from different dies than those of any of the others in our list, which circumstance, in view of the former great rarity of the type, makes its provenance practically certain. There were at least six specimens in the hoard.

HERCULIUS.

89. *Obv.* MAXIMIANVS P AVG

Rev. HERCVLI CONSERVATORI Bust of Hercules r. in the lion's scalp. T R Treviri. C. —.

A aurei, 19 mm. (1) *4.95 grm. Brit. Mus., Evans 43, XVIII. 10; (2) 5.61 grm. Naville Cat. xii. 3014. Same dies as (1) and doubtless in the hoard though not so specified.

[Pl. XXIV. 13.]

90. *Obv.* MAXIMIANVS PF AVG

Rev. Same die. T R Treviri. C. —.

A aurei, 19 mm. (1) *4.95 grm. Schulman Stock, 1931 = Vierordt Cat., June 5, 1930, 600; (2) 5.21 grm. Brit. Mus., Evans 44, XVIII. 11; (3) R. 398. Identical dies.

[Pl. XXIV. 14.]

91. *Obv.* MAXIMIANVS P AVG

Rev. MARTI PROPVGNATORI Helmeted bust of Mars r. T R Treviri. C. —.

A aureus, 19 mm. R. 407. Different obverse die from no. 89, same reverse die as no. 92.

GALERIUS *as Caesar.*92. *Obv.* MAXIMIANVS NOB C

Rev. Same die. T R Treviri. C. —.

A aurei, 20 mm. (1) *4.97 grm. Newell; (2) R. 429. Same dies, same obverse die as no. 87, *sic x*, &c. [Pl. XXIV. 15.]

93. *Obv.* MAXIMIANVS N C*Rev.* Same die. T R Treviri. C. 131.

AV aurei, 20 mm. (1) 5.30 grm. Evans Coll., *Num. Chron.* 46, XVIII. 13; (2) *5.15 grm. Newell; (3) R. 428 = ? Naville xii. 3015, 4.92 grm. Same obverse and reverse dies; same reverse die as nos. 91 and 92.

[Pl. XXIV. 16.]

CONSTANTIUS as Caesar.

94. *Obv.* CONSTANTIVS N C*Rev.* Similar. T R Treviri. C. 167.

AV aurei, 19 mm. (1) 4.95 grm. Evans Coll., *Num. Chron.* 45, XVIII. 12; (2) 5.31 grm. Newell; (3) R. 420; (4) Schulman Cat., March 17, 1924, 324. Same obverse and reverse dies; reverse die differing from that of nos. 91 to 93.

Evans thought that there was an example of Constantius as Augustus with this reverse, C. 167, **CONSTANTIVS AVG**, "Ancien Catalogue", but upon inquiry it was found that there is no coin of this description in the Paris Cabinet. Probably N C was misread by Cohen as AVG. It follows that Evans's extension of this series (pp. 271-274) into the year 305 when Constantius became Augustus is invalid.

95. *Obv.* Same die.

Rev. MARTI PROPVGNATORI Mars in military dress advancing r., holding spear in r. and shield in l. T R Treviri. C. 168.

AV aurei, 19 mm. (1) *5.32 grm. Newell; (2) 5.30 grm. Evans Coll. (*Num. Chron.* 22); (3) 5.22 grm. Brit. Mus., Evans 22, XVII. 10; (4) Schulman Cat., June 5, 1930, 618 = (2) (?). All same dies. [Pl. XXIV. 17.]

96. *Obv.* CONSTANTIVS NOB C*Rev.* Similar. *SIS Siscia. C. —.*A* aureus, 19 mm., *5.47 gm. Newell.
[Pl. XXIV. 18.]The companion piece for Galerius is C. 132,
Mattingly, *Roman Coins*, LXII. 6.

GALERIUS as Caesar.

97. *Obv.* MAXIMIANVS N C*Rev.* SOLI INVICTO Bust of Sol Invictus, radiate
and draped r. T R Treviri. C. —.*A* aureus, 19 mm., *5.55 gm. Brit. Mus.,
Evans 47, XVIII. 14. [Pl. XXIV. 19.]The obverse die is identical with that of no. 93,
Marti propugnatori.Group X. B. *Vota* issues of Aquileia and Nicomedia.

DIOCLETIANUS.

98. *Obv.* DIOCLETIANVS PF AVG*Rev.* XX DIOCL ETIAN IAVG SMAQ in a
wreath. Aquileia. C. 549.*A* aureus, 20 mm., *5.30 gm. Newell.
[Pl. XXIV. 20.]

HERCULIUS.

99. *Obv.* MAXIMIANVS AVGVSTVS*Rev.* XX MAXIMIANI AVG NK in monogram in
cabochon at top of wreath. SMN Nicomedia.
C. 704.*A* aureus, 19 mm., 5.26 gm. Schulman Cat.,
Dec. 16, 1926, 306 = Naville viii. 1464.These types, nos. 98, 99, were issued only for the
Augusti. They may belong to the Vicennial
of Maximian, April 1 to May 1, 305. Cf. the
discussion under nos. 116, 117.

Group XI. Issues of smaller module, chiefly those with inscriptions ending in AVGG ET CAESS NN

DIOCLETIANUS.

100. *Obv.* DIOCLETIANVS P AVG

Rev. IOVI CONSERVAT AVGG ET CAESS NN

Jupiter seated l. on high-backed throne, thunderbolt in r., l. on sceptre. T R Treviri.

A aurei, 17 mm. (1) R. 382; (2) 5.45 gm. Brussels, *Rev. Belge*, 1931, Pl. I. 2. Same dies as (1); (3) *5.41 gm. Newell. Same obverse, different reverse die. [Pl. XXV. 1.]

101. *Obv.* DIOCLETIANVS AVG

Rev. PRIMI XX IOVI AVGVSTI Jupiter seated l. holding thunderbolt and resting r. on spear. TR Treviri. C. 393. Pink, p. 35, wrongly describes this as inscription within wreath like no. 84.

A aureus, 17 mm., 5.20 gm. Brussels, *Rev. Belge*, 1931, Pl. I. 5.

Although this aureus bears the inscription relating to the *primi xx* of Diocletian, the size of the flan and the style of the head, and lastly the reverse type, similar to that of no. 100, prove that the issue should be placed close to our Group XI, or, more exactly, at the termination of Group X. It then would be a revived issue commemorating Diocletian's Vicennalia coincidentally with Maximian's anniversary in 305. One has only to study closely the heads of Diocletian on the Brussels coins, Pl. I. 6, 3, and 5, to reach the conclusion that while these issues must be spread over a couple of years, the logical order is as here indicated. The head of Diocletian is nearly identical with that of Galerius on the *rot xx Augg* issue, no. 109.

HERCULIUS.

102. *Obv.* MAXIMIANVS AVG*Rev.* HERCVLI CONSER AVGGET CAESS NN

Hercules standing facing, head l., r. on club,
bow in l., lion's skin over l. arm, quiver over
r. shoulder. T R Treviri. C. —.

A aureus, 17 mm. R 397.

103. *Obv.* MAXIMIANVS PF AVG*Rev.* Same die. T R Treviri. C. 234.

A aurei, 17 mm. (1) *5.27 grm. Newell;
(2) 5.27 grm. Idem; (3) 5.35 grm. Idem;
(4) 5.44 grm. Schulman Stock, 1931 = (?)
Schulman Cat., June 5, 1930, 603; (5) 5.11
grm. Brit. Mus., Evans 9, XVII. 4; (6)
R. 396. Same obverse and reverse dies; same
reverse die as no. 102. [Pl. XXV. 2.]

This is the commonest type in the hoard; other
specimens in sale catalogues prove that it was
a large issue.

104. *Obv.* MAXIMIANVS P AVG Style similar to
nos. 85, 86.*Rev.* Similar. C. —.

A aureus, 17 mm., 5.18 grm. Brussels, *Rev.*
Belge, 1931, Pl. I. 8. Different reverse die
from any of the above. The style of the
obverse die shows the close connexion with
the *vota* group, just as there is later found
an interlocking obverse connecting no. 105
(Hercules standing) and no. 108 (*vota* issue).

CONSTANTIUS as Caesar.

105. *Obv.* CONSTANTIVS NOB C*Rev.* Similar. T R Treviri. C. —.

A aurei, 17 mm. (1) 5.17 grm. Mrs. Newell;
(2) R. 419; (3) *5.68 grm. Newell; (4)

Schulman Cat., March 17, 1924, 322; (5) 4.85 grm. Brit. Mus., Evans 21; (6) 5.19 grm. Brussels, *Rev. Belge*, 1931, Pl. I. 10. Nos. (1) and (2) have the same reverse die, that of 102, 103; (3) and (4) same reverse die, different from (1) and (2), all same obverse die; (6) same obverse, different reverse die from any of above. [Pl. XXV. 3.]

GALERIUS as Caesar.

106. *Obv.* MAXIMIANVS NOB C

Rev. IOVI CONSERVAT AVGG ET CAESS NN
Jupiter seated l., as usual. T R Treviri.
C. 121.

A aurei, 17 mm. (1) *5.64 grm. Newell; (2) 5.34 grm. Brit. Mus., Evans 30, XVII. 13; (3) 5.40 grm. Evans Coll., *Num. Chron.* 30; (4) R. 427; (5) Schulman Cat., June 5, 1930, 620; (6) 5.18 grm. Brussels, *Rev. Belge*, 1931, Pl. I. 14. All same dies except (6), whose reverse is slightly different and identical with that of no. 100 (2). [Pl. XXV. 4.]

107. *Obv.* Similar.

Rev. IOVI CONSERVATORI AVGG ET CAESS
NN Jupiter standing l., as usual. P K
Karthago. C. —, Pink —. Perhaps unique.

A aureus, 19 mm. R. 406.

For this unpublished aureus, a parallel of Herculus with Mars standing is illustrated in Naville, iii (Evans), Pl. VI. 161 = C. 392 (identical coin), Pink, p. 23. The contrast between the style of these issues of Galerius as Caesar and Herculus, and our *felix advent* coin, no. 69, shows that they are much later; and the inscriptions ending in *Augg et Caess nn* places them in 303 to 305.

CONSTANTIUS as Caesar.

108. *Obv.* CONSTANTIVS NOB C

Rev. VOT XX CAESS in a wreath. $\frac{1}{-}$ Treviri.
C. —.

A aureus, 17 mm., *4.99 grm. Newell =
Schulman Cat., June 17, 1924, 987.

[Pl. XXV. 5.]

The reverse inscription seems to indicate that the Caesars in 303-304 anticipated their own twentieth anniversary by ten years. No corresponding piece for Galerius is as yet known. As Constantius is still Caesar, the issue must date before May 1, 305, and since the obverse die is identical with that of no. 105, it must be classed strictly with the Jupiter-Hercules group. *Vot xx Caess*, which occurs also on the *Æ* (C. 341), is all the more strange since about this time Galerius was issuing his coin with *sic x sic xx*, No. 87. Probably, however, *Vot xx Caess* means nothing more than that the Caesars were included in the Vicennalia of the Augusti.

GALERIUS as Caesar.

109. *Obv.* MAXIMIANVS NOB C

Rev. VOT XX AVGG NN in a wreath. $\frac{1}{-}$
Treviri. C. —.

A aureus, 17 mm., *5.03 grm. Brit. Mus.,
Evans 33, XVIII. 2. [Pl. XXV. 6.]

This reverse is found also with the heads of Hercules (C. 683) and Constantius as Caesar (C. 338). Now, though the reference is to a Vicennial anniversary of the Augusti, the small module and the style of the

head indicate that its period is much closer to 305 than 303, and hence it may have been struck for the Vicennalia of Hercules, cf. below under no. 117. This coin would be later than the preceding piece, which in turn is probably of 304, as are also the Jupiter-Hercules series, all of small module, and subsequent to the larger *vota* coins of Diocletian struck in 303.

DIOCLETIANUS.

110. *Obv.* DIOCLETIANVS PF AVG

Rev. PIETAS AVGG ET CAESS NN *Pietas* standing facing, head r., holding child at her breast; child standing at l., r. arm raised towards *Pietas*. T R Treviri. C. 381.

A aureus, 17 mm. R. 387.

CONSTANTIUS as Caesar.

111. *Obv.* CONSTANTIVS NOB C

Rev. Similar. T R Treviri. C. 217.

A aurei, 17 mm. (1) *5.24 grm. Newell; (2) 5.70 grm. Evans Coll., *Num. Chron.* 26, XVII. 11; (3) R. 421. All same obverse and reverse dies. [Pl. XXV. 7.]

This peace type is known for all the colleagues in the empire.

DIOCLETIANUS.

112. *Obv.* DIOCLETIANVS P AVG

Rev. CONSERVATORES AVGG ET CAESS NN Jupiter on the l. holding transversal sceptre and Hercules on the r. with club in l. and lion's skin over l. arm, standing confronting, holding in r. hands a globe on which is Victory extending a wreath towards Hercules. P T R Treviri. C. —.

A aurei, 17 mm. (1) 5.40 grm. Evans Coll., *Num. Chron.* 1931, 6; (2) 5.03 grm. Schulman Cat., Dec. 16, 1926, 296 = *idem*, June 17, 1924, 974; (3) Glendining Cat., March 1931, 1219.

HERCULIUS.

113. *Obv.* MAXIMIANVS AVG

Rev. Similar. P T R Treviri. C. —.

A aureus, 17 mm. Schulman Cat., March 17, 1924, 318 = *idem*, Dec. 16, 1926, 302.

114. *Obv.* CONSTANTIVS NOB C

Rev. Similar. P T R Treviri. C. —.

A aurei, 17 mm. (1) *5.10 grm. Evans Coll., *Num. Chron.* 18, XVII. 9; (2) 5.31 grm. Brit. Mus., Evans 18. Same pair of dies.
[Pl. XXV. 8.]

The obverse die is also coupled with the *pietas* reverse no. 111, while the reverse is identical with 112(2). This type is lacking for Galerius.

GALERIUS as Caesar.

115. *Obv.* MAXIMIANVS NOB C

Rev. SALVS AVGG ET CAESS NN Salus standing facing l., holding in her r. arm a serpent which she is feeding, an object (apple?) held in her l. T R Treviri. C. 193.

A aureus, 17 mm. Schulman Cat., March 17, 1924, 326.

HERCULIUS.

116. *Obv.* MAXIMIANVS PF AVG

Rev. CONCORDIA AVGG ET CAESS NNNN Concordia seated l. on high-backed throne, patera in r., double cornucopiae in l. AQ Aquileia. C. 48.

A aureus, 19 mm., *5.39 grm. Newell.
[Pl. XXV. 10.]

In attributing this type to Galerius, Maurice (I, p. 301, XII) is in error, for the portrait is unmistakably that of Herculius. Also he misquotes the ending of the reverse inscription as *nn*. The form *nnnn* found only at this mint modifies both *Augg* and *Caess*. Pink places this issue just before the festival issues of large flan, *xx Diocletiani Aug* and *xx Maximiani Aug SMAQ*, and like issues of *SMT* and *SMN* (cf. nos. 98, 99) all of which he assigns to the Vicennalia of Diocletian in 303. For, he argues, if these large-flan coins of Aquileia with *SMAQ* are of the year 303, then the *vot xx Augg* with eagle as mint-mark, nos. 62, 63 of Diocletian and Maximian, with their complementary pieces for Constantius and Galerius, *vot x Caess*, of smaller flan, must be earlier, and are consequently dated by him in 296-299. The portraits of these latter pieces do, as Pink remarks, resemble those of the last issues of the Roman mint for the Diocletianic period (nos. 56 f.). Yet it seems surprising that the *vot xx Augg* coins of Aquileia should so greatly anticipate the *vota* issues of Treves. The problem is intricate, and probably demands more research than can be here given. The fact that the mint-letters are wanting is no indication that the *vot xx Augg* issue of Aquileia is earlier than 303, for the corresponding *vot xx sic xxx* of 303 at Treves are unsigned, and it would appear possible that Aquileia added her eagle emblem below the wreath as a mark distinguishing her issues from those of Treves. The stylistic resemblance between the first gold coinage of Aquileia and the last of Rome is natural, but the deduction that both are exactly contemporary does not necessarily follow. Now assuming that the unsigned *vota* coins of Aquileia belong to 303,

which would seem an obvious occasion for the inauguration of this mint, then our *concordia Augg et Caess nnnn* AQ, struck for the Augusti, and the complementary pieces for the Caesars, *comites Augg et Caess nnnn*, would be the next issues, and these would then correspond to the issues at Treves and Carthage with reverse inscriptions ending in *Augg et Caess nn* initiated about 304. Then the SMAQ *vota* issue of large flan may be assigned to Maximian's Vicennalia, which as we shall see was celebrated April 1 to May 1, 305. Following this second Vicennial issue at Aquileia would come the *Felicitas-Concordia* group of Maximinus and Severus as Caesars, also of large flan and identical style of portraiture, struck between May 1, 305, date of the abdication of the Seniores when Constantius and Galerius became Augusti, and July 25, 306, date of the death of Constantius when Severus became Augustus. Certainly the portraits on these two groups just mentioned are extraordinarily close in style and the coins are similar in module. Important is the consideration that the *vota* coins of Treves which we would assign to Diocletian's own Vicennalia (nos. 84-87) are struck on a considerably smaller module than the SMAQ and SMN coins. In addition, the Vicennial issues which we claim as Maximian's special commemorative pieces are struck only in his domain of Italy, where he was at the time, and in the Eastern mint of Nicomedia, Diocletian's residence, where on the concluding day of the festival he abdicated. This Nicomedian issue we find reason to date in 305 (cf. no. 117). On the other hand, if our theory holds, the Vicennial issues for Diocletian's own festival of 303 (nos. 62, 63, and 84-87) occur only in Western mints,

at Treves and Aquileia, which is natural, inasmuch as the two emperors met for this first celebration in Rome.

In style no two heads could be closer than those of Diocletian on the coin *xx Diocletiani Aug SMAQ* (our no. 98 and also Nav. Cat. III, pl. V. 155), and of Galerius as Augustus on the *Concordia Augg nostr AQ* coin (Pink, I. 21). Hence we conclude that the order and dating of the issues of Aquileia here discussed is as follows: *vot xx Augg* and parallels *vot x Caess* in wreath, eagle as mint-symbol, 303 A.D.; *concordia Augg et Caess nnnn*, with the complementary *comites Augg et Caess nnnn*, 304-305; *xx Diocletiani Aug* and *xx Maximiani Aug SMAQ* (corresponding pieces at SMT), April 1 to May 1, 305, Maximian's Vicennial month; *concordia Augg nostr*, mark AQ (and *concordia Caess nostr*, corresponding pieces at SMT)³³ May 1, 305, to July 25, 306. In support of his earlier dating of the *Vot xx Augg* coins of Aquileia, Pink maintains that the bronze coins of Rome bearing *Vot xx* also belong to 296-299, but on that we cannot comment in the absence of sufficient material for investigation.

Group XI. B. After May 1, 305.

GALERIUS as Augustus.

117. *Obv.* MAXIMIANVS AVGVSTVS

Rev. X MAXIMIANI AVG in a wreath, at the top of which, in the cabochon, is NK in monogram. SMN Nicomedia. C. and Maurice —.

A aureus, 19 mm. Schulman Cat., March 17, 1924, 319.

³³ In *J.R.S.*, 1932, pp. 16, 17, Alföldi calls these coins heavy solidi, and dates them "just after the death of Chlorus"!

This aureus and a corresponding one of Constantius, *x Constanti Aug*, Montagu Cat. XXVI. 726, were issued at Nicomedia on or after May 1, 305, date of the abdication of the elder Augusti. The Decennalia of the new rulers, however, actually belonged to 303, two years earlier. What is the reason for this belated issue? The answer seems to be that during the month just preceding the abdication, Herculus had celebrated his Vicennial anniversary, and these Decennial coins of the new Augusti were struck on or just subsequent to May 1 of the same year. That Maximian did not celebrate his Vicennalia jointly with Diocletian in 303, as often stated by numismatists, is the conclusion to which we are forced by the Abdication medallion struck at Siscia now in the Berlin Museum.³⁴ On the obverse of this historically most important medallion, Pl. XXVI. 17, is the bust of Constantius as Augustus, while on the reverse Maximian on the right, wearing the imperial robe and holding a short sceptre, is relinquishing the globe of sovereignty to his adopted heir, Constantius. Between the two figures is XX in a wreath which Seeck has interpreted as a reference to Maximian's Vicennalia, celebrated from April 1 to May 1, the month preceding. That the abdication took place on May 1, 305, is well established by Lactantius (*de mortibus persecutorum*, 19. 1), and is confirmed by an inscription *CIL*. VI. 497, in which Constantius and Galerius still bear the title of Caesar on April 14 of that year. There is certainly no more reasonable assumption than that Diocletian and Maximian should have abdicated upon the completion of

³⁴ *Zeit. f. Num.*, 1885 (XII), p. 125.

Maximian's twenty years of rule as the latter had solemnly promised to do at the Vicennalia of Diocletian in 303 in the temple of Jupiter Capitolinus.³⁵ Now, Diocletian became emperor on Nov. 17, 284, and his twentieth anniversary was celebrated in Rome, Nov. 17 to Dec. 16, 303, namely on the conclusion of the nineteenth rather than at the close of the twentieth year of his reign, as is amply supported by historical evidence. Maximian was clothed with the purple on April 1, 286, and his Vicennalia was also anticipated by one year. Thus the interpretation of the Siscian medallion as commemorating Constantius' accession by its obverse and Maximian's abdication and Vicennalia by its reverse, and as being in fact issued on the very day of the change of rule, seems to account most satisfactorily for its issue. For, the other interpretations—Constantius on the right handing the globe to his Caesar, Severus, the XX then referring to an anticipated Vicennalia, or Severus on the right handing the globe to Constantius, are unlikely. Since the imperial robe and sceptre held by the figure on the right proclaim that emperor the superior in rank, it would have to be Constantius, and the XX in a wreath, symbol of the Vicennalia, is scarcely appropriate to him even as anticipated, for his Decennalia fell in 303, while for Severus it is equally unsuitable, as he was at that very moment being appointed as Caesar.

Let us see if the *vota aurei* in the hoard confirm our conclusion that Seeck's interpretation is correct. That with *primi xx Iovi Aug cos viii*, no. 84 (cf. c. 393, *primi*

³⁵ *Incert. Pan.* VII. xv. huic illum in Capitolini Iovis templo iurasse poenituit.

xx Iovi Augusti)³⁶ is an issue of Diocletian alone in 303 at Treves, and no parallel pieces for Maximian exist. The "first Vicennial of Jovius Augustus" might imply an earlier and a later anniversary. The *votis* (or *vot*) *xx sic xxx* aurei of Treves, nos. 85, 86, contemporary with the former, do not from the inscription imply a joint celebration, and Maximian's issue of this type may be regarded as the usual sharing of an issue by a colleague. On the other hand, the *vot xx Augg nn* issue of this mint, no. 109, refers to the Vicennalia of two Augusti. But this is one of the small module series, and the style of Galerius' portrait, smaller head in higher relief, is strikingly similar to that of the heads on the *pietas* and *conservatores* types, which latter must by their position in the series have been struck just before the abdication. This *vot xx Augg nn* issue, known only for Herculus and the Caesars, therefore probably recalls the Vicennalia of Maximian in 305. As to the Nicomedian coins, the *xx Maximiani* type of Herculus sometimes bears the monogram NK in the cabochon at the top of the wreath while the companion piece of Diocletian does not. But NK is regularly found on the *x Maximiani Aug* and *x Constanti Aug* aurei datable after May 1, 305. Missong says "the striking of coins with this monogram falls in the brief space of time from the middle of 305 to the middle of 307".³⁷ On the unsigned aurei of Aquileia, *vot xx Augg*, mint-mark eagle, see the discussion under no. 116. Even the *xx Diocletiani* and *xx Maximiani* coins of SMT and SMAQ already analysed seem to us like

³⁶ *Rev. Belge*, 1931, Pl. I. 5, probably struck in 305, cf. no. 101.

³⁷ *Zeit. f. Num.*, 1880, p. 288.

the *vot ex Augg nn aureus* of Galerius above to be merely the expression of the complete sharing of the emperors in their respective Vicennalia, in the light, of course, of the historical evidence for two separate Vicennalia, which we may note is the accepted view of competent historians such as Seeck³⁸ and Stein.³⁹

That a separate celebration was held for Herculius in 305 seems to be borne out by the Arras medallions from the Treves mint. The *felicitas temporum* type, emperors standing sacrificing, was struck in the following varieties: (1) *quinio*, Diocletian,⁴⁰ dated *cos viii* = 303, while the corresponding *quinio* of Herculius,⁴¹ dated *cos vii*, bears merely a Hercules type on the reverse, whereas we might expect the *felicitas* type for both if they celebrated jointly; (2) a *quinio* of Constantius⁴² as Caesar, dated *Caess xiii cos v* = Jan. 1 to May 1, 305 or more precisely, April 1 to May 1, refers probably to Herculius' Vicennalia since, as Evans acutely observes, the sacrificing emperors, who are both nimbate, must be Diocletian and Herculius rather than the Caesars; (3) a medallion of Constantius⁴³ as Augustus, hence within the period May 1, 305, to July 25, 306, struck perhaps, like the Berlin Siscian medallion above, on the very day of Constantius' accession, May 1, which was *ex hypothesi* the last day of Herculius' Vicennalia, may like the Siscian piece, bear a reference both to the accession and the Vicennalia. When an example of this third medallion was published by the writer,⁴⁴ it

³⁸ *Zeit. f. Num.*, 1885 (XII), pp. 127 ff. ³⁹ *Op. cit.*, pp. 101, 123.

⁴⁰ *Aréthuse*, Pl. VIII. 2.

⁴¹ *Ibid.*, 4.

⁴² Evans, *N.C.*, 1930, p. 233, Pl. XVI. 5.

⁴³ Evans, *ibid.*, Pl. XVI. 6 and *Aréthuse*, Pl. VIII. 7.

⁴⁴ *Num. Notes*, p. 26, Pl. III.

was difficult to explain the reverse type satisfactorily, since the two new Augusti, Galerius and Constantius, would hardly be commemorating their own Decennalia on this medallion of 305, two years after the event. But, as in the case of the *x Maximiani aureus* in question, if an anniversary was in progress or just past, the allusion would be intelligible.

Our conclusion then is that the *x Maximiani Aug* and *x Constanti Aug* aurei of Galerius and Constantius struck at Nicomedia on or after May 1, 305, must be issues synchronous with the *xx Maximiani Aug* coins of Hercules struck in the same mint (as well as at Ticinum).⁴⁵

118. *Obv.* MAXIMIANVS PF AVG

Rev. IOVI CONSERVAT AVGG ET CAESS

Jupiter seated l., as usual. P R Rome. C. and Maurice —.

A aureus, 18 mm., *3.99 grm. Newell.

[Pl. XXV. 9.]

The poor style of the portrait and lettering, as well as the low weight and paler colour of the gold, suggest at once that this is an ancient forgery. Very few gold coins were struck in Rome during the period May 1, 305, accession of Galerius to October 28, 306, when Maxentius got possession of the city through a revolt of the pretorian guard. However, another example of good weight, 5.18 grm., has been located in the British Museum [Pl. XXV. 11], and although the seated Jupiter

⁴⁵ Perhaps some examples without NK, Hamburger Cat., May 27, 1929, Pl. 20. 1558 and Naville Cat. VIII, Pl. 55. 1449 belong to Diocletian's Vicennial while others, Naville Cat. VIII, Pl. 55. 1464, are of 305. The Hamburger coin has smaller head and more distinctive portrait, and it may be the only issue of 303.

is most atrociously rendered, the head is well done, and the coin is in no wise suspect.⁴⁶ The rarity of the issue is emphasized by the fact that no gold for the period was known to Maurice.

119. *Obv.* MAXIMIANVS PF AVG

Rev. CONCORDIA AVGG ET CAESS NN
Concordia seated, as usual. T R Treviri.
C. —.

AV aurei, 17 mm. (1) R. 425; (2) *5.70 grm.
Brit. Mus., Evans 35, XVIII. 3; (3) 5.44 grm.
Brussels, *Rev. Belge*, 1931, Pl. I 13. All
same dies. [Pl. XXV. 12.]

CONSTANTIUS *as Augustus.*

120. *Obv.* CONSTANTIVS PF AVG

Rev. SALVS AVGG ET CAESS NN Salus standing,
as usual. T R Treviri. C. 275, note 1.

AV aureus, 17 mm., *5.26 grm. Newell.
[Pl. XXV. 13.]

SEVERUS *as Caesar.*

121. *Obv.* SEVERVS NOB CAES

Rev. Similar. C. —.

AV aureus, 17 mm., *5.14 grm. Newell.
[Pl. XXV. 14.]

The reverse die is identical with that of no. 115,
Galerius as Caesar.

GALERIUS *as Augustus.*

122. *Obv.* MAXIMIANVS PF AVG

Rev. IOVI CONSERVATORI AVGG ET CAESS
NN Jupiter standing, as usual. T R Treviri.
C. 373, attributed to Hercules.

AV aureus, 17 mm., *5.24 grm. Newell.
[Pl. XXV. 15.]

⁴⁶ Cf. the remarks on the Berlin aureus of Maxentius, p. 334,
no. 4, whose portrait follows the style of this coin.

123. *Obv.* Similar.

Rev. IOVI CONSERVATORI AVGG NN Jupiter standing l., as usual. T R Treviri. C. 372, Herculus.

Av aureus, 17 mm., 5.42 gm. Brussels, *Rev. Belge*, 1931, Pl. I. 15. Different dies from any of the others.

CONSTANTIUS *as Augustus.*

124. *Obv.* CONSTANTIVS PF AVG

Rev. HERCVLI CONSER AVGG ET CAESS NN Hercules standing as usual, but slenderer figure. T R Treviri. C. 146.

Av aurei, 17 mm. (1) *5.71 gm. Newell; (2) Schulman Cat., March 17, 1924, 323; (3) idem, March 30, 1925, 175; (4) R. 418; (5) 5.18 gm. Brit. Mus., Evans 29. (2) (4) same reverse; (1) (3) different and different from each other; (3) (4) same obverse; (1) (2) different and different from each other. This is a later issue of the type begun in 303-304. [Pl. XXV. 16.]

MAXIMINUS II DAZA *as Caesar.*

125. *Obv.* MAXIMINVS NOB C

Rev. Same die as no. 122. C. —.

Av aurei, 17 mm. (1) *5.40 gm. Brit. Mus., Evans 38; (2) R. 435. [Pl. XXV. 17.]

The Jupiter (Galerius), Hercules (Constantius) [also, Hercules (Severus), C. 48], and Jupiter (Maximinus) series, all standing figures, nos. 122-125, are contemporary issues for the colleagues of the Second Tetrarchy, May 1, 305-July 25, 306, corresponding to the series, Jupiter seated (Diocletian), Hercules standing (Herculus), Hercules standing (Constantius), and Jupiter seated (Galerius) of the First Tetrarchy.

126. *Obv.* MAXIMINVS NOB CAES

Rev. PRINCIPI IVVENTVT Maximinus in military dress standing facing l., supporting military standard with r., resting l. on upright sceptre. P R Rome. C. 140.

A aureus, 17 mm. Schulman Cat., March 17, 1924, 330.

GALERIUS as Augustus.

127. *Obv.* MAXIMIANVS PF AVG

Rev. VBIQVE VICTORES Galerius standing facing, head r., in military dress with cloak, transversal spear in r., globe in l.; captive seated on either side. T R Treviri. C. —.

A aurei, 17 mm. (1) *5.85 grm. Evans Coll., *Num. Chron.* 36; (2) 5.46 grm. Brit. Mus., Evans 36, XVIII. 4; (3) R. 431. Same dies. [Pl. XXV. 18.]

CONSTANTIUS as Augustus.

128. *Obv.* CONSTANTIVS PF AVG Larger head, fine portrait.

Rev. Same die. C. 280.

A aurei, 17 mm. (1) *5.55 grm. Newell; (2) R. 422.

Nos. 127 and 128, all from the same reverse die, probably commemorate Constantius' victories over the Picts and Caledonians in Britain shortly before his death at York, July 25, 306. [Pl. XXV. 19.]

GALERIUS as Augustus.

129. *Obv.* MAXIMIANVS PF AVG Head of later style than no. 127.

Rev. IOVI CONSERVATORI AVGG ET CAESS
NN Jupiter seated l., as usual. T R Treviri.
C. —.

A/ aureus, 17 mm. Schulman Cat., June 5,
1930, 601.

CONSTANTIUS as Augustus.

130. *Obv.* CONSTANTIVS PF AVG Same die as 128.

Rev. CONCORDIA AVGG ET CAESS NN
Concordia seated, as usual. T R Treviri.
C. —.

A/ aureus, 17 mm., 5.54 grm. Schulman Cat.,
June 17, 1924, 984 = idem, Dec. 16, 1926,
307.

SEVERUS as Caesar.

131. *Obv.* SEVERVS NOB CAES New style head,
better portrait.

Rev. SOLI INVICT CONSERVAT AVGG ET
CAESS NN Sol Invictus, radiate, standing
facing, head l., r. hand raised, globe in l.
T R Treviri. C. —.

A/ aurei, 17 mm. (1) *5.37 grm. Newell;
(2) 5.55 grm. Brit. Mus., Evans 37, XVIII. 5;
(3) R. 434. All same dies. [Pl. XXV. 20.]

MAXIMINUS as Caesar.

132. *Obv.* MAXIMINVS NOB C

Rev. Same die. T R Treviri. C. 177.

A/ aurei, 17 mm. (1) *5.24 grm. Newell;
(2) 5.13 grm. Brit. Mus., Evans 39, XVIII. 6;
(3) 5.18 grm. Mrs. Newell; (4) R. 437; (5)
4.94 grm. Brussels, *Rev. Belge*, 1931, Pl. I. 18.
(1) (5) same obverse die; (2) (4) same obverse,
different from preceding; (3) different obverse
from all others; all same reverse die.

[Pl. XXVI. 1.]

Group XI. C. After July 25, 306.

SEVERUS as Augustus.

133. *Obv.* SEVERVS PIVS FEL AVG

Rev. HERCVLI CONSERVAT AVGG ET
CAESS NN Hercules standing, as usual.
T R Treviri. C. —.

A aurei, 17 mm. (1) R. 433; (2) 5.31 grm.
Brussels, *Rev. Belge*, 1931, Pl. I. 17. (1) and
(2) same reverse, different obverse die.

This coin, struck between the date of Severus' accession, July 25, 306, and his death at the hands of Maxentius in April, 307, has a new reverse die differing from the first, second, third, and fourth dies of this type, nos. 102, 104, 105(6), and 124, though it is very close to the last, and represents a revival of the type first issued in 303-304, and continued on the coins of 305-306.

CONSTANTINE THE GREAT AS CAESAR.

134. *Obv.* CONSTANTINVS NOB CAES

Rev. PRINCIPI IVVENTVT Constantine in military dress standing l., resting r. on military standard, l. on upright spear; E in l. field; in r. field, traces of Ξ erased from the die.
P R Rome. C. —.

A aureus, 19 mm., *5.50 grm. Evans Coll.,
Num. Chron. 41, XVIII. 8. [Pl. XXVI. 2.]

On this coin, struck by Maxentius for Constantine in Rome, the head resembles Maxentius. Evidently Constantine's portrait, which is always beardless in his own domain, was not known in the provinces distant from Treves at this early period of Constantine's reign. The issue belongs to the interval between Oct. 28, 306, and some time in April, 308, that is from Maxentius' accession to the time when he broke off relations of

political amity with his father, Maximian, and Constantine. Doubtless it was issued before March 31, 307, when Maximian conceded to Constantine the right to the title of Augustus. As Maxentius had already assumed this title for himself on coins issued by him in Feb. 307, he would of course immediately have placed the coveted title on coins struck by him for Constantine, as the latter was certainly willing in spirit to do in his own mint in Gaul. Evidently the very brief period of good understanding between Constantine and Maxentius did not permit of this, for no coin of Maxentius from the Gallic mint is known. Our coin then must be dated in the first few months of Maxentius' reign, Oct. 306 to the early part of 307.

MAXENTIUS as Caesar or Princeps.

135. *Obv.* MAXENTIVS NOB C

Rev. FELIX KARTHAGO Carthage standing facing, head l., holding ears of wheat in r. and fruits (?) in l. P K Karthago. C. 66.

A aureus, 19 mm. R. 439.

136. *Obv.* Same die.

Rev. ROMA AETERNA Roma seated l. on rock in front of which is a shield; in r. a globe surmounted by Victory holding a wreath toward Roma; l. resting on upright sceptre. P K Karthago. C. and Maurice —, unpublished.

A aureus, 18 mm., 5.31 grm. Newell.

[Pl. XXVI. 3.]

The above issues of Carthage must fall within the broad period, Oct. 28, 306, accession of Maxentius, and the revolt of Alexander in Africa in May or June, 308. Since, however, Maxentius assumed the title of Augustus in Feb. 307, the coins belong to the first three

months of his reign. In order to appease Galerius, Maxentius at first took the title of Caesar or *princeps*, avoiding the title of Augustus from motives of caution. A similar issue in silver for Constantine, Brit. Mus., is figured by Maurice, i, Pl. XXI. 12. There is also an aureus with the same reverse and *Maximinus nob C*, described by Maurice, i, p. 347, belonging to the period before Maxentius' accession.

137. *Obv.* MAXENTIVS PRINC INVICT

Rev. CONSERVATOR VRBIS SVAE Roma as
above. E in l. field. P R Rome. C. 48.

A aureus, 18 mm. R. 438.

138. *Obv.* D N MAXENTIVS PRINC

Rev. HERCVLI COMITI AVGG ET CAESS NN
Hercules standing, as usual; E in l. field.
P R Rome. C. and Maurice —.

A aureus, 18 mm., *5.43 grm. Brit. Mus.,
Evans 40, XVIII. 7. [Pl. XXVI. 4.]

The reverse type of no. 135 is personal to Maxentius, and the figure of Roma of nos. 136, 137, together with the inscriptions, *princ invict* and *conservator urbis suae*, suggest the "saving" of Rome for the usurper against Severus, the legitimate ruler. The reverse of no. 138 resumes the Hercules types issued at Treves by the members of the First and Second Tetrarchies. At the beginning of Maxentius' reign the Augusti were Galerius and Severus, and the Caesars, Constantine and Daza, and the employment of the conventional inscription and type would be of the nature of political propaganda to express Maxentius' amicable attitude toward the recognized emperors. The period Oct. 28,

306 to Feb. 307 is further indicated for all these coins of Maxentius from the fact that no coins with the ambiguous title *princeps* are known from the mint of Aquileia, which first came into Maxentius' control by the victory over Severus in 307.

MAXENTIUS as *Augustus*.

139. *Obv.* MAXENTIVS PF AVG Bust of Maxentius facing, bare-headed and wearing paludamentum and cuirass.

Rev. VICTORIA AETERNA AVG N Maxentius in military dress, bare-headed, seated l. on rock flanked by a cuirass, helmet, and two shields, receiving in r. hand a globe from Victory who advances towards him; l. hand resting on shield. POST Ostia. C. —. M. i, p. 274, XXX, same reverse, but obverse *Maxentius pf inv Aug*, bust l., helmeted and cuirassed, C. 124.

Av aurei, 19 mm. (1) *5.50 grm. Jameson Coll., Cat. III, Pl. XXIII. 476 = R. 440; (2) Evans Coll., *Num. Chron.* p. 278.

[Pl. XXVI. 7.]

What was this *victoria aeterna Aug n*? This is easily determined, for Maxentius issued a number of gold coins with interrelated inscriptions and types unmistakably referring to the recapture of Africa in 311. These are, first, an aureus in the British Museum [Pl. XXVI. 6], 18 mm., 4.9 grm., Wigan Coll., *victor omnium gentium aug n*, POST, Maxentius on l. in military dress standing r., l. resting on upright spear, receiving a small figure of Victory on a globe offered by Mars, advancing l., trophy over l. shoulder; between them, kneeling before Maxentius, is Africa identifiable by

her elephant's head-dress ;⁴⁷ and second, an aureus, 20 mm., 5.00 grm. in Florence,⁴⁸ *pax aeterna Aug n*, POST, C. 97, Maxentius on r. in civilian dress standing l., r. arm extended to receive two kneeling figures approaching on bended knees and presenting wreaths ; the figure on the r. has a radiate head, Aeternitas(?), the one on the l. is Africa coiled in the elephant's scalp ; between these figures and the emperor stands a Roman soldier, l. resting on upright shield, r. arm extended towards emperor as he presents Africa and her companion. Maurice describes the female figure at the r. as Roma with turreted head-dress, but she is clearly radiate. As the other figure, Africa, represents the recovered province, the second personification would hardly be Rome. This latter piece has on the obverse the facing bust as on our coin. From its *pax* inscription, and the type in general, this coin must be dated as the last of the series relating to the recovery of Africa. There are also *vota aurei* with *victoria aeterna Aug n* as on our coin, Victory standing r., holding on a cippus a shield, captive below ; on shield VOT V (perhaps doubtful "reprise de Tanini") ;⁴⁹ and VOTIS X.⁵⁰ The latter of these coins has also the facing bust, and both must refer similarly to the victory in Africa, and consequently have been issued in 311 after this event. The *vot v* issue may have been struck after the middle of the year, and the *votis x* after Oct. 28, which marks the end of the full five-year period of Maxentius,

⁴⁷ Maurice, i, p. 275, xxxi, Pl. VII. 12, the identification of the kneeling figure as Africa is new.

⁴⁸ *Ibid.*, i, p. 282, VII.

⁴⁹ *Ibid.*, i, p. 274, XXVIII.

⁵⁰ *Ibid.*, i, p. 274, XXIX, corrected to *votis x*, Pl. XIX. 8.

306-311, when the quinquennial vows having been accomplished, the decennial might be invoked, or there may have been a shorter interval between the two. But both issues must belong at the earliest to about the middle of the year because, as we shall show, all the evidence tends to establish that the campaign in Africa took place in the spring.

A word as to the events that preceded the recovery of Africa. After Maxentius' quarrel with his father, the aged Maximian, in 308, a successful uprising of the African troops still loyal to their old commander, who had saved them from the Mauri, was forced upon Alexander, Maxentius' vicar of the diocese. Alexander became emperor, and through this defection of Africa, Rome was probably obliged to draw her grain supply from Galerius' province of Egypt. When in 311 Maxentius found himself further weakened by the alliance between Constantine and Licinius, he formed a compact with Maximinus Daza, and under the pretext of avenging the murder of his father by Constantine, began to prepare for war against the latter. The first step, the recovery of Africa, was easily accomplished by the sending of a small army under his praetorian prefect, Rufinus Volusianus and the general, Zenon.

That this happened in the first half of the year is established by the data on various coin issues collected by Maurice. Seeck also cites the following. In September of this year Rufinus was appointed sole *consul ordinarius* as a reward for his triumph. It is probably this victory which is mentioned in an inscription set up in Caesarea in Mauretania in which Maximian, who died before July 25, 310, and Galerius who died in

May, 311, appear as *divi*. Thus our coin is most precisely dated in the first half of 311.⁵¹

CONSTANTINE THE GREAT as *Augustus*.

140. *Obv.* CONSTANTINVS PF AVG

Rev. VOTIS V MVLTIS X Victory standing r, supporting on a cippus a shield on which she has written VICTORIA AVG in four lines. PTR Treviri. C. 744. Maurice, i, p. 299, VIII.

A solidus, 17 mm.* Schulman List; now in a private collection in Holland.

[Pl. XXVI. 8.]

This rare coin commemorates Constantine's Quinquennalia of July 25, 310, anticipated by one year and celebrated again in 311, and also recalls a victory of Constantine alone, *victoria Aug.* This victory must surely be the successful campaign beyond the Rhine undertaken by Constantine in 310, for this event suits both the mention of the *vota* and the early style of the coin, and the fact that there is just this one issue struck at Treves and in Constantine's name only.

In the *Incerti Panegyrici* VII, pronounced at Treves in the presence of Constantine, the details of Constantine's break with Maximian, and his success against the Franci are related. From the time when Maximian, after his second abdication in 308, retired to Gaul, he was not on the best of terms with his son-in-law, Constantine, who most naturally ignored him. At this time Arles was the chief imperial residence, and the army was stationed near the Alpine passes, only such garrisons as were needed being held on the Rhine

⁵¹ Seeck, *Gesch. d. Untergangs d. ant. Welt*, i³, p. 493; Stein, *Gesch. d. spät.-röm. R.* i, p. 129.

border. When, therefore, disturbances broke out among the barbarian peoples in the spring of 310, Constantine quickly led a small force northwards. Maximian, having accompanied him for part of the march, then withdrew and treacherously destroyed all of the military stores at depots along the route, hoping by this means to delay Constantine's return march. After he had reached Arles, he suddenly assumed the purple for the third time, and attempted by bribery to gain prestige with the army. But this was of little avail. Upon Constantine's return with his forces, via the Saône and Rhone, the military road having been rendered useless, Maximian fled from Arles to the strongly fortified Marseilles. Here the harbour was quickly taken by Constantine. After a fruitless parley had taken place between the old emperor, speaking from the walls of the city, and Constantine standing below, the soldiers within the town opened the gates to their lawful leader and the city fell. Though Maximian's life was spared for the moment, he was later murdered, at the instigation of Constantine, so it was said. In the *Panegyricus VII* delivered on the anniversary of the foundation of Treves, which was *after*⁵² the Quinquennalia of Constantine of July 25, the death of Maximian is noted, and Constantine is justified for having brought it about.

As our solidus was struck to celebrate the Quinquennial anniversary, and at the same time to record a victory of Constantine alone, there can be little doubt that it refers to this victory, and was issued about July 25, 310.

⁵² Maurice says "antérieurement", but see *Paneg.* VII. 2.

141. *Obv.* Similar.

Rev. PRINCIPI IVVENTVTIS Constantine in military dress standing r., transversal spear in r., globe in l. PTR R Treviri. C. 412.

Av solidi, 17 mm. (1) *4.78 grm. Newell;
(2) R. 447. [Pl. XXVI. 9.]

This is a unit of the *denio* from the hoard, *Aréthuse*, VIII. 9. Although it commemorates Constantine's accession to the rank of Caesar, it dates probably after May or June, 309, when he was finally recognized as Augustus by Galerius, because it is a solidus, and the few solidi in the hoard can all be shown to belong to 309 or later. The *princeps iuventutis* aurei struck in the name of Constantine as Caesar at Rome,⁵³ Serdica,⁵⁴ and Treves⁵⁵ are the earliest issues of this type. Interesting is the Br. Mus. example (Pl. XXVI. 10) of Treves showing him as a "callow youth".⁵⁶ The portrait on our coin, moreover, resembles that on other solidi which are demonstrably much later than 306, date of the aurei.

142. *Obv.* IMP CONSTANTINVS PF AVG Bust r., radiate and draped, cuirass on shoulder, seen from the rear.

Rev. Similar. C. 409. Maurice, i, p. 290, IX.

Av 1½ solidi (?), 22 mm., *6.57 grm. PTR Treviri. Evans Coll. 1932. [Pl. XXVI. 11.]

The reverse of this brilliant coin is identical in style and details with the *denio* noted above, and the obverse inscription is the same except that the words *pius* and *felix* are written out in full on the *denio*, so that its date

⁵³ Maurice, i, p. 169, V. 2, our no. 134, cf. no. 126.

⁵⁴ *Ibid.* ii, p. 379, VII. 1.

⁵⁵ *Ibid.* i, p. 385, XIII.

⁵⁶ Cf. Fig. 10.

is about the same. It is not however an exact copy of the *denio*, for the latter has a laureate head. Maurice who does not recognize the piece as a multiple of the solidus unit, classes it in the pre-solidus period, i.e. before 309. This is of course too early, but the coin is not as late as a similar piece of Ostia with laureate head of Constantine and POST*, weighing 8.35 grm., double solidus (?).⁵⁷ This latter piece dates after the battle of the Mulvian bridge, October 28, 312, when the mints of Rome and Ostia had fallen into Constantine's possession. Ticindum and Rome also issued this reverse for Constantine after 312. But we are inclined to see a slight difference between the portrait of Constantine on this Evans coin and the following Treves piece which is certainly after the battle, and to place the Treves solidi of the *principi iuventutis* type, nos. 141, 142, about 310-311.

143. *Obv.* CONSTANTINVS PF AVG

Rev. S P Q R OPTIMO PRINCIPI Three Roman military standards surmounted respectively by a hand, an eagle on a thunder-bolt, and a wreath. PTR Treviri. C. 556. Maurice, i, p. 401, XIV, and p. 204.

AV solidus, 17 mm. (1) *4.58 grm. Newell; (2) 4.31 grm. Brussels, *Rev. Belge*, 1931, Pl. I. 19. (1) and (2) different obverse and reverse dies. [Pl. XXVI. 12.]

Maurice has explained most satisfactorily this issue, which is of remarkable historical interest. It refers to the *rapprochement* of Constantine and the Roman Senate after the defeat and death of Maxentius in Oct. 312, and the entry of Constantine into Rome.

⁵⁷ Maurice, i, p. 288, XII, Pl. XIX. 14.

On this occasion the Senate decreed to Constantine the *titulus primi ordinis* or *primi nominis titulus*, namely, the right of placing his name at the head of the list of the Augusti and of legislating, which had previously belonged to Daza who had refused to yield it to him. There can be no doubt as to the correctness of Maurice's interpretation, since the same types on a solidus of Ostia in the British Museum⁵⁸ [Pl. XXVI. 13], prove that this issue was struck after the capture of Rome by Constantine.

LICINIUS.

144. Obv. LICINIVS PF AVG

Rev. IOVI CONSERVATORI AVGG Jupiter seated l., as usual. PTR Treviri. C. and Maurice —.

A solidus, 17 mm., *4.42 grm. Newell.

[Pl. XXVI. 14.]

This coin which was unknown to Cohen and Maurice (i.e. with this obverse)⁵⁹ is in brilliant though not strictly uncirculated condition. A synchronous issue of Licinius struck in Ostia⁶⁰ proves that our Treves coin like the *s.p.q.r.* solidus dates after the battle of the Mulvian bridge. Licinius' coin was struck under the authority of Constantine, and a parallel for the latter is to be presumed.⁶¹ From the reverse type and inscription, the style and module, we may infer that it was issued during the period of temporary political

⁵⁸ C. 556. Maurice, i, p. 287, IX.

⁵⁹ *Ibid.*, p. 422, XI, C. 102, bust laur. and draped [Pl. XXVI. 15], is a later issue, 317-20, according to M.

⁶⁰ Berlin Cabinet, not in Cohen or Maurice.

⁶¹ Is this C. 307, a solidus struck in Rome dated 317-320 by Maurice, i, p. 222, VII?

accord between the two emperors, which as we know extended up to the first part of 314. But the mint of Ostia was closed in July, 313, when it was transferred to Arles. Thus we obtain most definite limits within which falls this last but one of the coins in our hoard, namely, from the last two months of 312 to July, 313.

CONSTANTINE.

145. *Obv.* Similar to no. 143.

Rev. GAVDIVM REI PVBLICAE Trophy, on either side of which is a captive seated in an attitude of distress. PTR Treviri. C. 163. Maurice, i, p. 45.

A solidi, 17 mm. (1) *4.38 grm. Schulman Stock, 1931; (2) R. 444. (1) and (2) different obverse and reverse dies, (1) apparently the earlier pair of dies; both in absolutely sharp or fresh from the mint condition.

[PL. XXVI. 16.]

This issue belongs to the same general period as the other solidi, 309–313. The reverse inscription and the seated captives suggest comparison with the solidus of Ticinum, *gaudium Romanorum*, similar type, in exergue *fran et alam, smt.*⁶² This latter type, however, is paralleled at Treves, as regards inscription and reference to the Franci and Alamanni, by the solidi, *gaudium Romanorum*, seated barbarian captive, above whom, a trophy, no mint-mark, but *Francia* or *Alamannia* in the exergue.⁶³ Treviran issues of these types were

⁶² Maurice, ii, p. 235, XI, Pl. VII. 12.

⁶³ There are various issues of earlier and later date. The type which we regard as consistent in style with our trophy-with-captives issue is earlier than the Ratto specimen, R. 445, and is illustrated in Mattingly's *Roman Coins*, Pl. LXI. 8.

not in the hoard, though, as it chances, there was an example with *Alamannia* in the Ratto sale catalogue along with the Arras coins. This coin, R. 445, and the two coins of Licinius, R. 441, *perpetua virtus Aug*, SMT (C. 140), and R. 442, *ubique victores*, PTR (C. 167) came from the Evans sale, Naville III, June, 1922, and so could not possibly have come from Arras.

Our solidus relates to the campaign of Constantine against the Franci and Alamanni in the spring of 313, recorded in *Incerti Paneg.* IX, chs. xxi, xxii, pronounced at Treves in 313, in which the conference between Constantine and Licinius at Milan in Feb. 313 is mentioned.

Now it is of great interest to note that the hoard does not contain any of the *ubique victores* series, emperor standing as on the *principi iuventutis* type, with two captives seated on either side, struck in the names of Constantine, Licinius, and Maximinus, parallel issues at Treves and Rome,⁶⁴ and therefore datable from Oct. 28, 312 (capture of Rome by Constantine), to July 313 (death of Maximinus). This series, from its known date, end of 312 to July (or, at the latest September⁶⁵ 313), its type relating to conquests of the barbarians, and the connexion with our Licinius solidus, no. 144, by an identical obverse die (Paris specimen of *ubique victores*, inventory no. 1678), doubtless commemorates

⁶⁴ Maurice, i, p. 234, XIII, Brit. Mus. 4.61 grm. (C. 567) attributes the issue to 320-324 but the style of Constantine's portrait forbids such a late date. It is close to that of the Ticinum solidi of about 315-317, *J.R.S.*, 1932, Pl. III, IV, and since the reverse does not occur in that very abundant series of Italian mintage, it is safe to conclude that it antedates them.

⁶⁵ When the news of the death of Maximinus may be assumed to have reached the West.

the conquest of Italy and also the successful fighting along the Rhine, March to July, 313. When we examine the style of the *gaudium rei publicae, ubique victores* and *gaudium Romanorum* series, it becomes evident that the two former antedate the latter, and that this is probably their chronological order. Now as the *ubique victores* series cannot be later than July-September, 313, our *gaudium reipublicae* coin would be the first of the long series of issues commemorating the conquest of the tribes across the Rhine.

The portrait on the earlier die (Schulman) is extraordinarily close to that of our *s.p.q.r.* coin issued certainly soon after Oct. 28, 312, and hence our assignment to about the middle of 313, because of the reverse type, seems to be confirmed.

In view of the foregoing analysis, the motive for the interment of the hoard cannot be sought in the disturbances preliminary to Constantine's expedition of the spring of 313,⁶⁶ otherwise our *gaudium reipublicae* coin would not be in the hoard. The circumstances of its burial far north of Lutetia Parisiorum, also, are not easily to be explained by the events of this period, for Constantine was in Milan when the news of this outbreak caused him to hurry northwards, and he pursued

⁶⁶ V. Tournear in the *Rev. Belge*, 1931, p. 13, attributes the *gaudium rei publicae solidus* to the campaign of Constantine against the Alamanni in 310, and believes that the rebellion of the tribes along the Rhine in the spring of 313 was the disturbance which motivated the burial of the coins. The campaign of 310, however, was less complete, and was interrupted by the treachery of Maximian. Moreover, we have a solidus struck for this occasion, no. 140. Again the *gaudium rei publicae solidus* is better preserved than the *s.p.q.r.* coin, which on the reverse shows some slight wear.

his conquests beginning with the Alamanni and continuing down the Rhine, and ending by ravaging the Franci situated near the mouth of the river.

Despite the fact that the hoard contains none of the *ubique victores* coins which, because of the death of Maximinus in the middle of 313, are not datable after September of this year at the latest, we find it most tempting to seek the cause of the deposit of this great treasure in a far more momentous military event, namely the war against Licinius. For during the early part of 314, Constantine was in Treves gathering and drilling his Gallic troops for the impending struggle with Licinius. Such a future event full of uncertainty for the individual, and necessitating a prolonged absence from Gaul, seems to suit admirably the chronology of the coins and the place of deposit. Some military officer or civil official of high rank in Constantine's entourage, called to accompany him on this expedition, may reasonably be conjectured as the owner of the coins and medallions, the jewellery and plate, who, finding himself summoned to war, confided his wealth for safe-keeping to the earth. Arras⁶⁷ would be on the road for a traveller coming from a fortified town like Bononia-Gesoriacum (Boulogne) on the coast to Augusta Trevirorum, where, as we know, Constantine was mustering his forces.

Naturally none of the issues relating to the war with Licinius, which began in September 314, could be

⁶⁷ It lies in the district of Artois, inhabited in Roman times by the Atrebates, and a Roman road led from Gesoriacum to Bagacum passing through Artois and possibly very near to Beaurains-lez Arras, our find-spot, a suburb of Arras; thence it bends to the south-east and turns again north-east to Treves.

among our pieces, and here we should state that the coin *virtus exercitus Gall.* PTR, C. 702, listed by Schulman⁶⁸ among coins probably, but not certainly, from the hoard, surely was not a member, as this very specimen is now in the Newell collection, and shows by its less brilliant state, its lack of the characteristic discoloration and evidence of mounting that it could not have belonged to it.

The latest date then for any coin in our hoard has been ascertained to be July–September, 313, and the burial date we conjecture to have been some months later, but not long after the beginning of 314.

AGNES BALDWIN BRETT.

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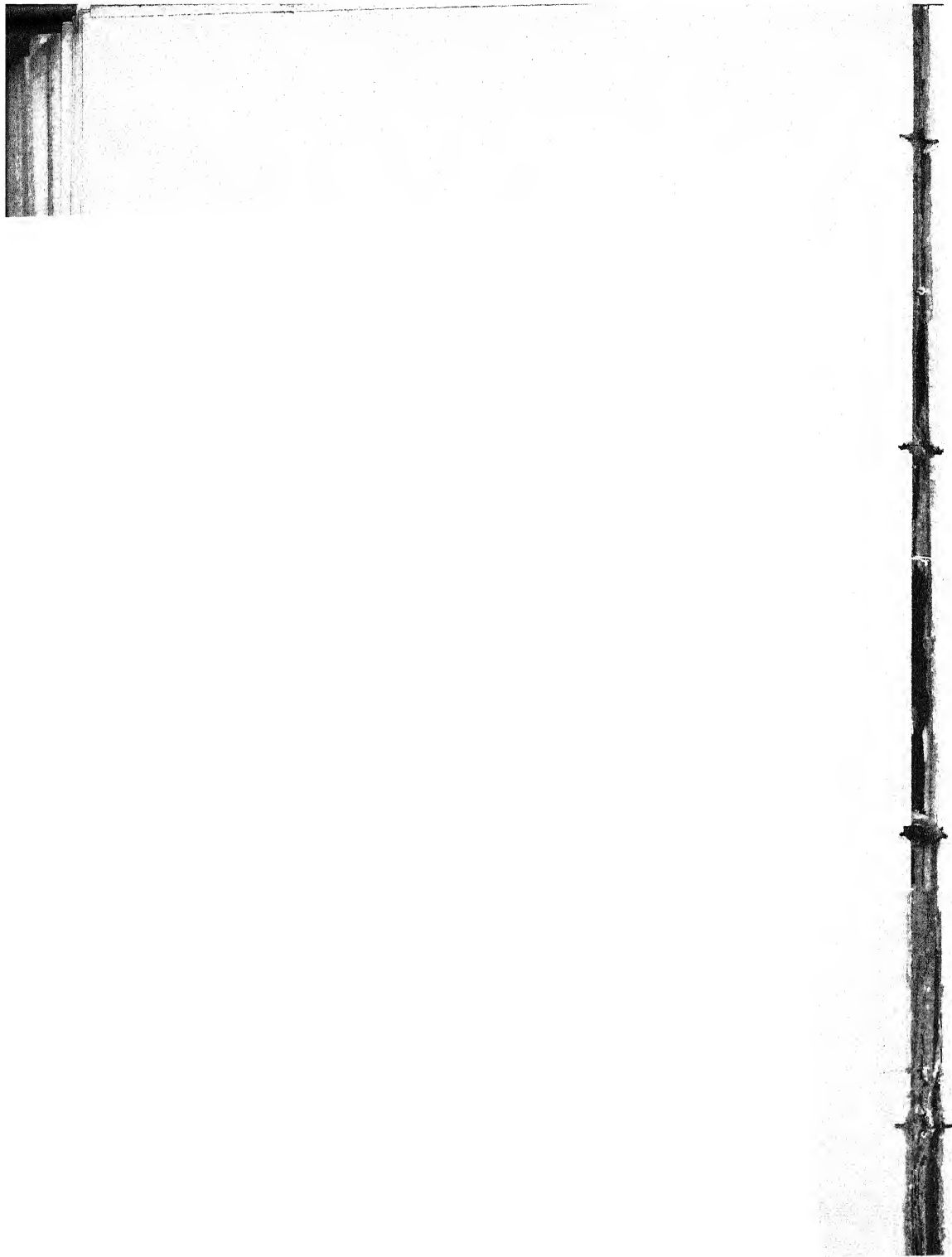


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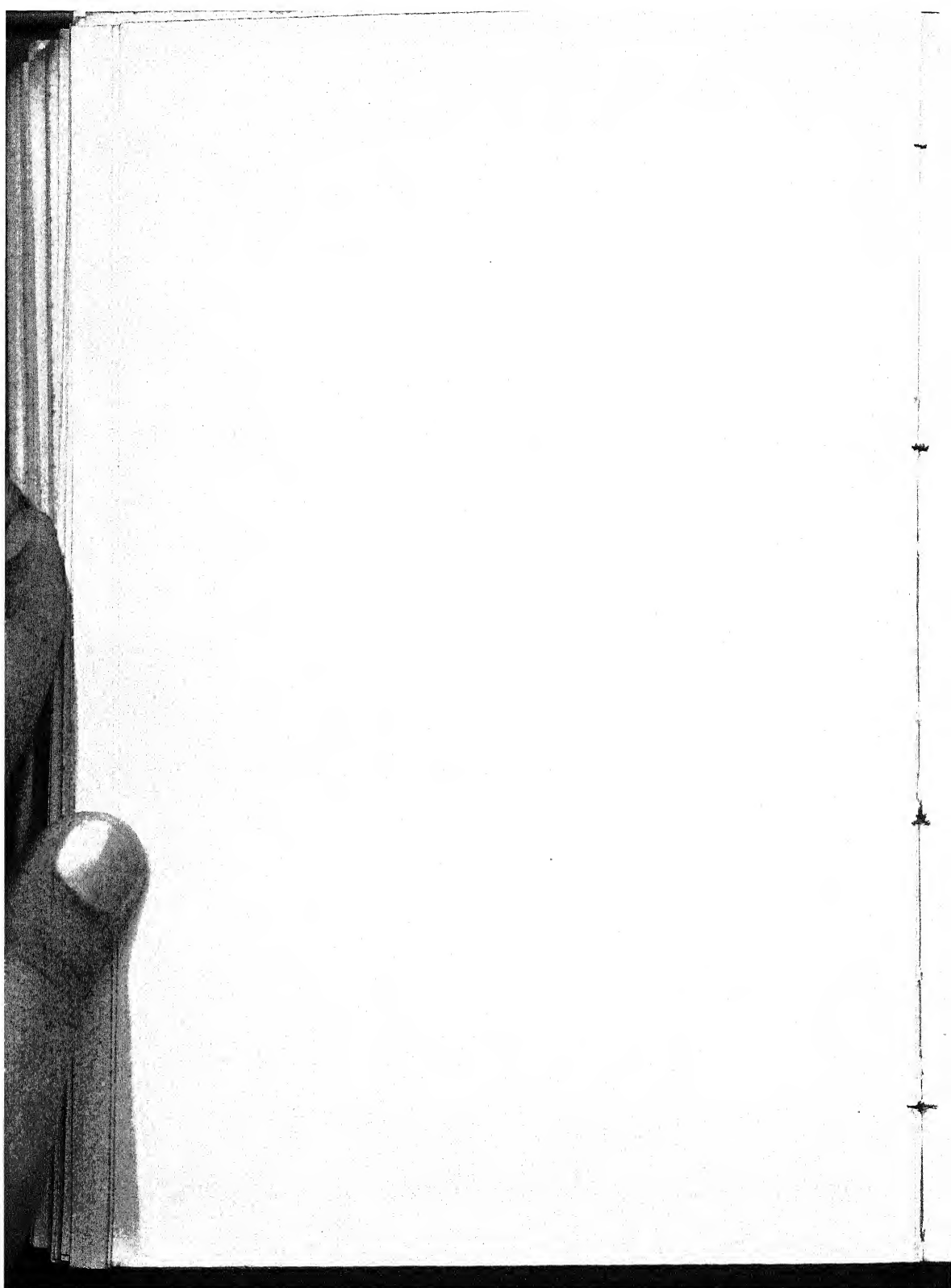
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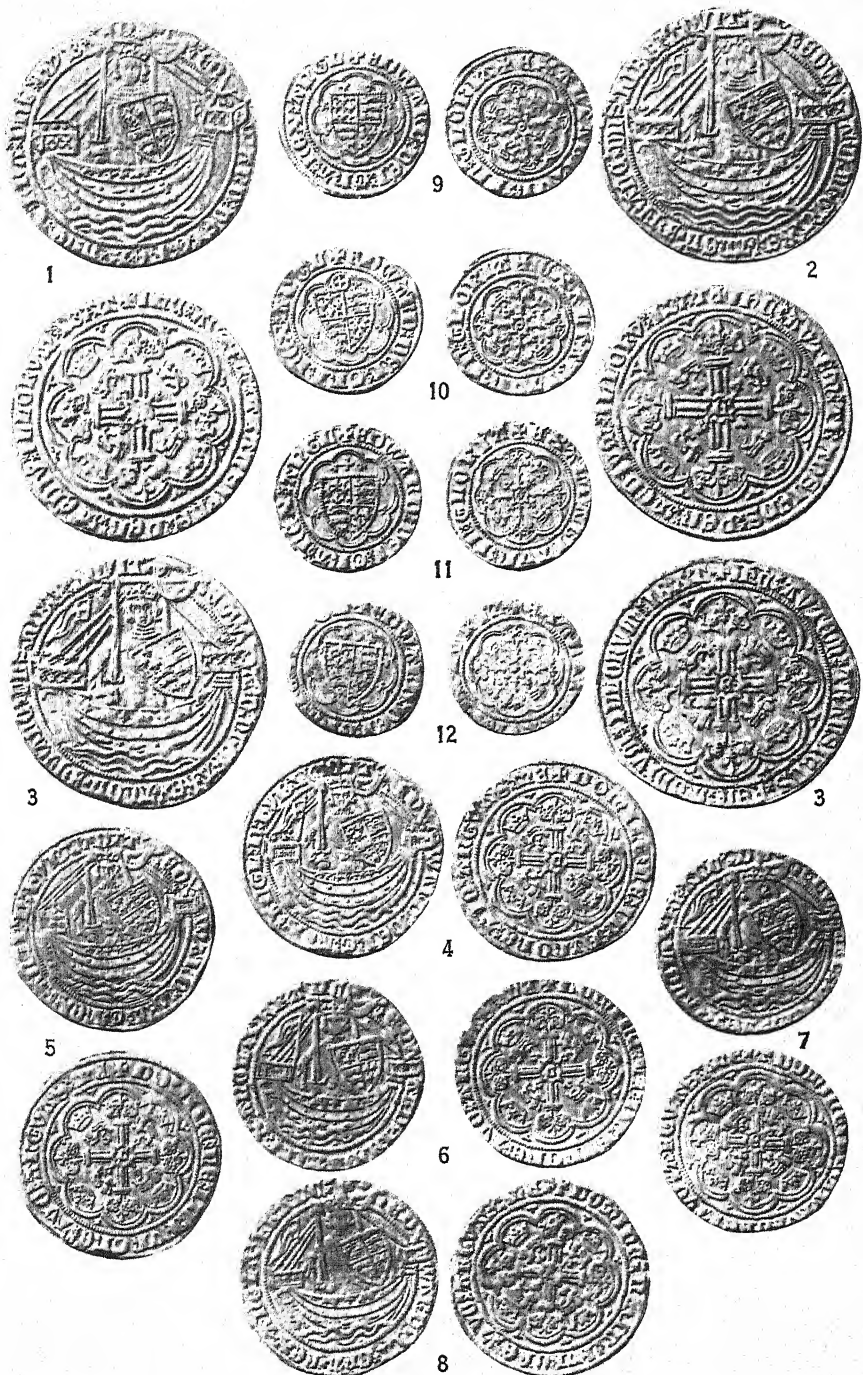


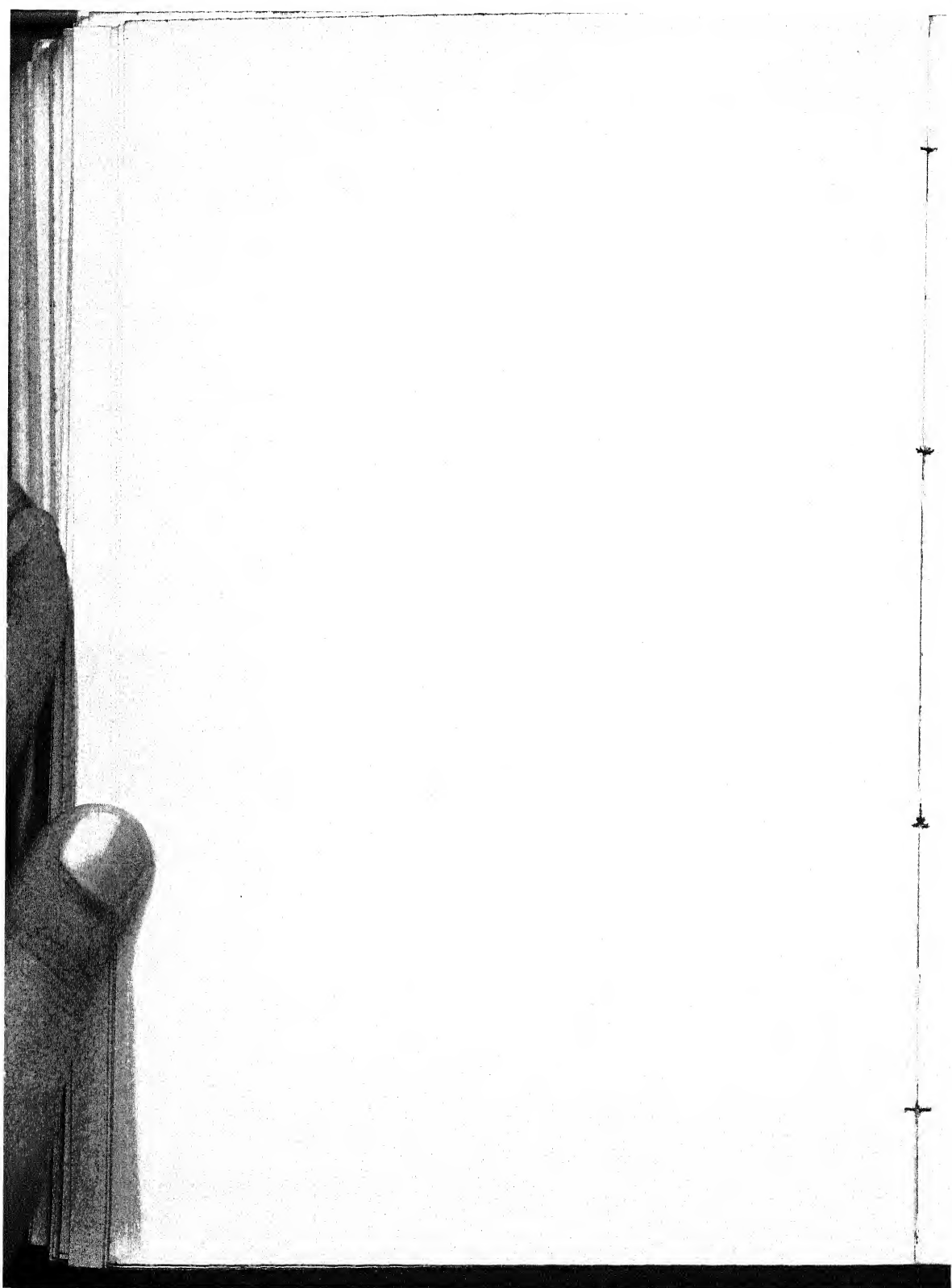
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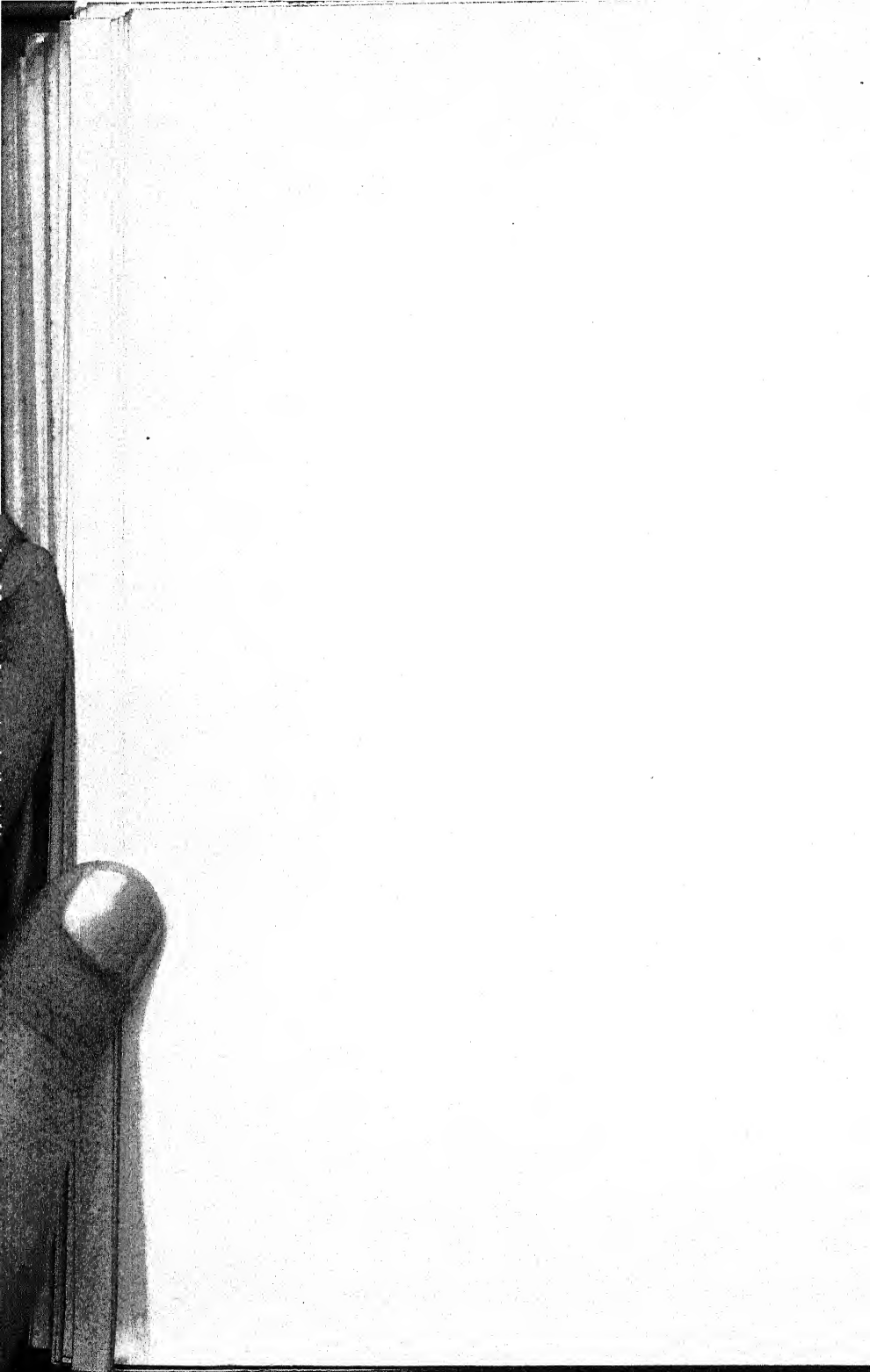


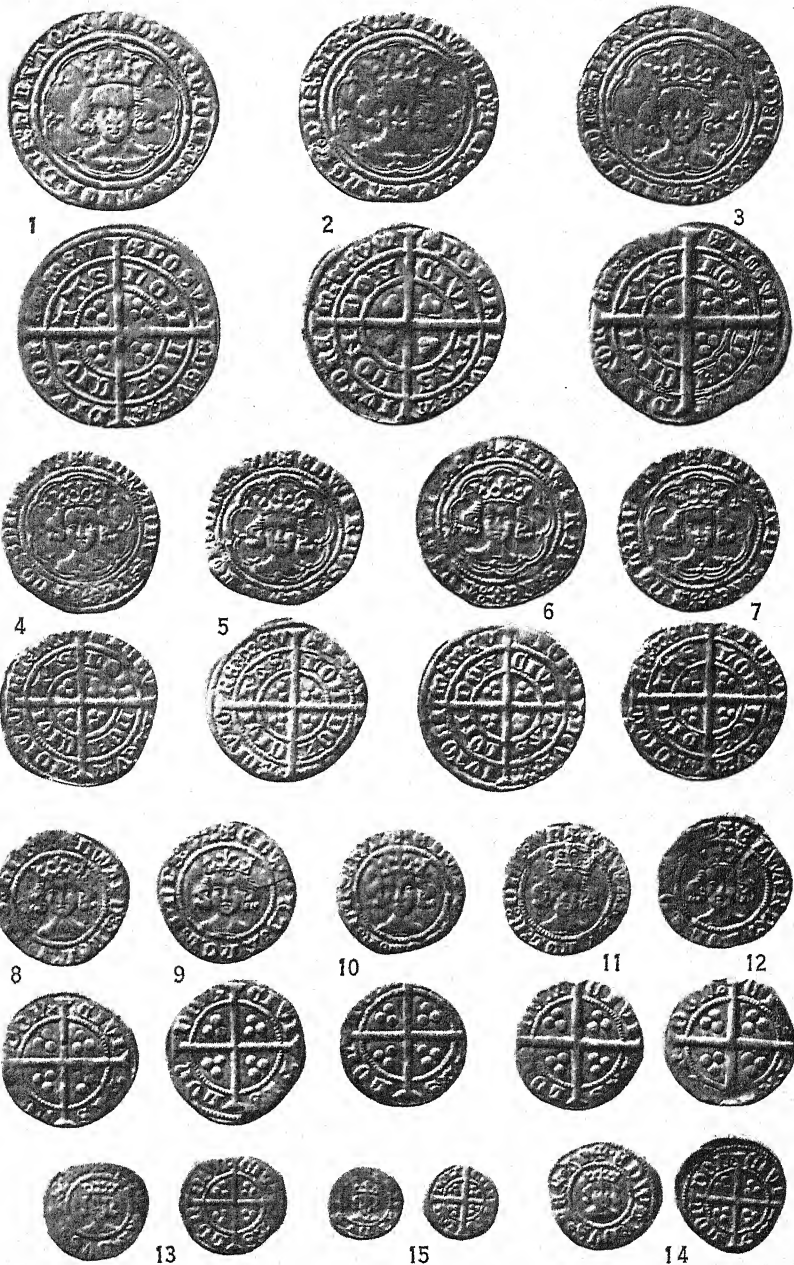
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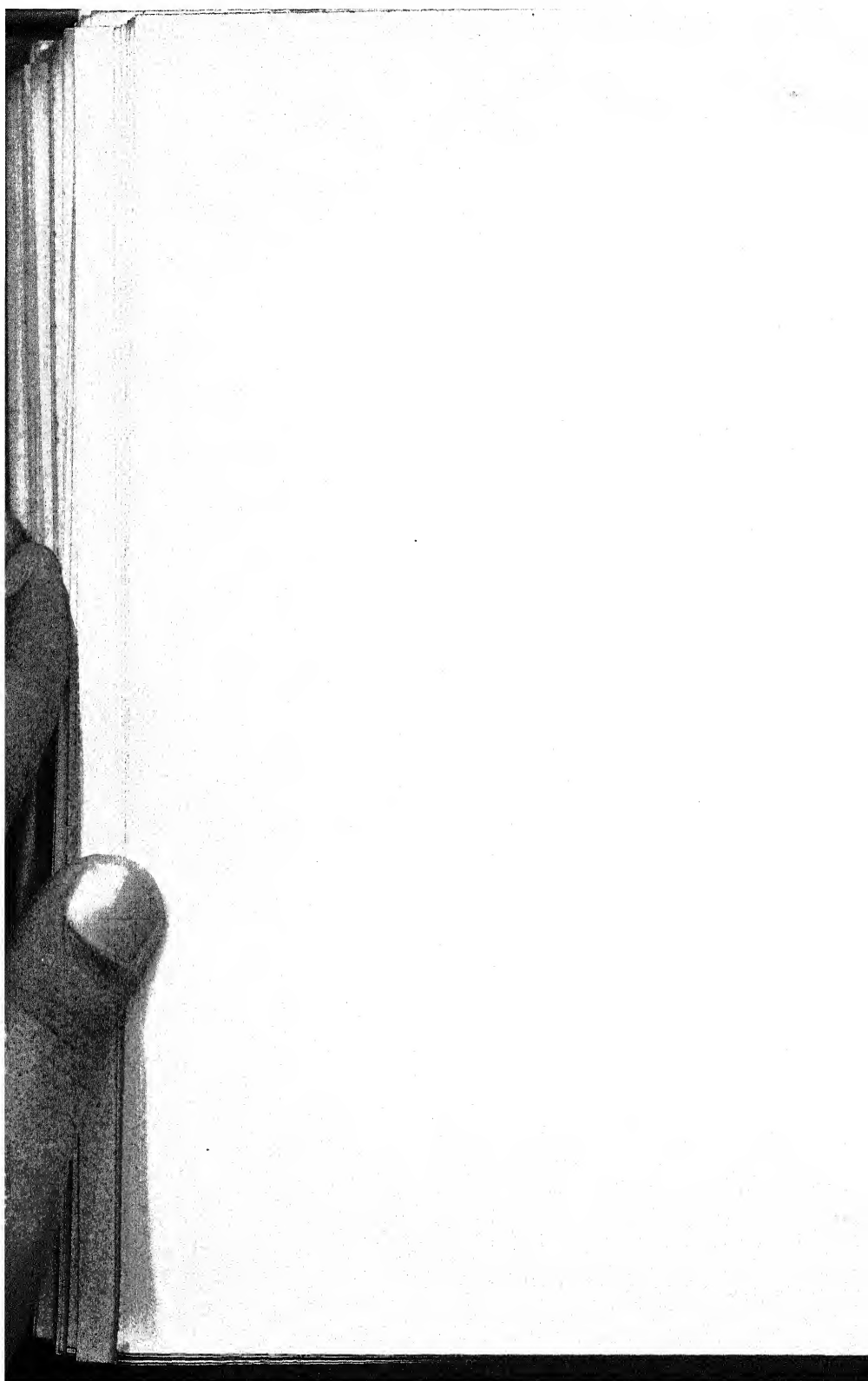


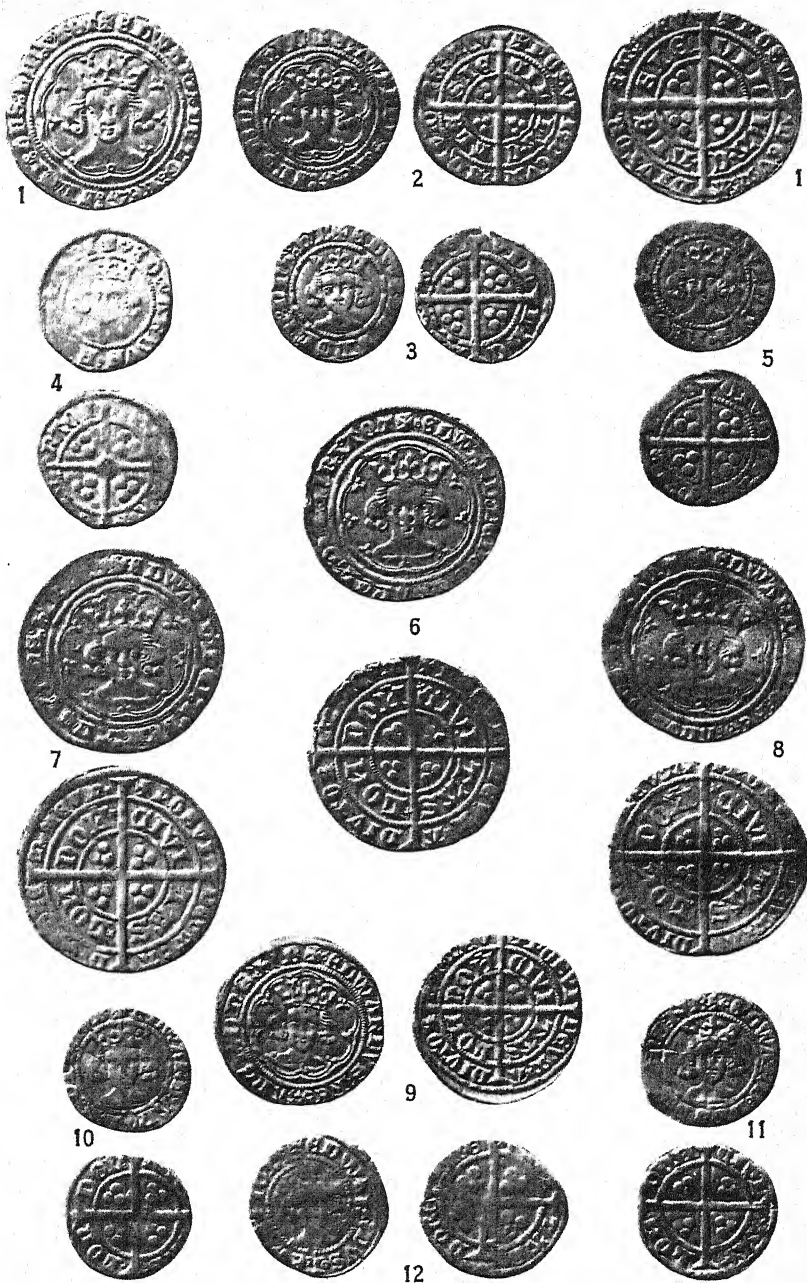
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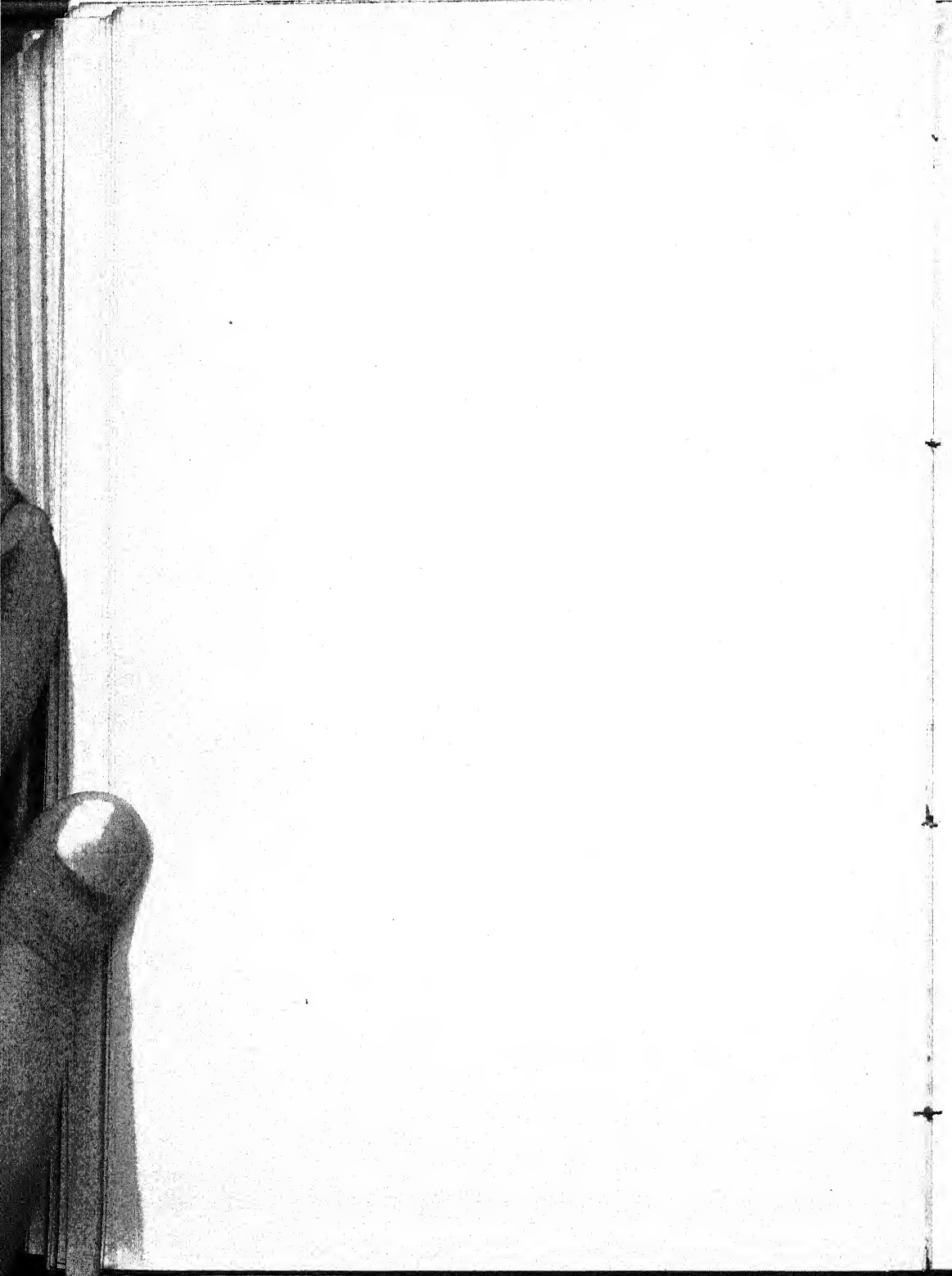














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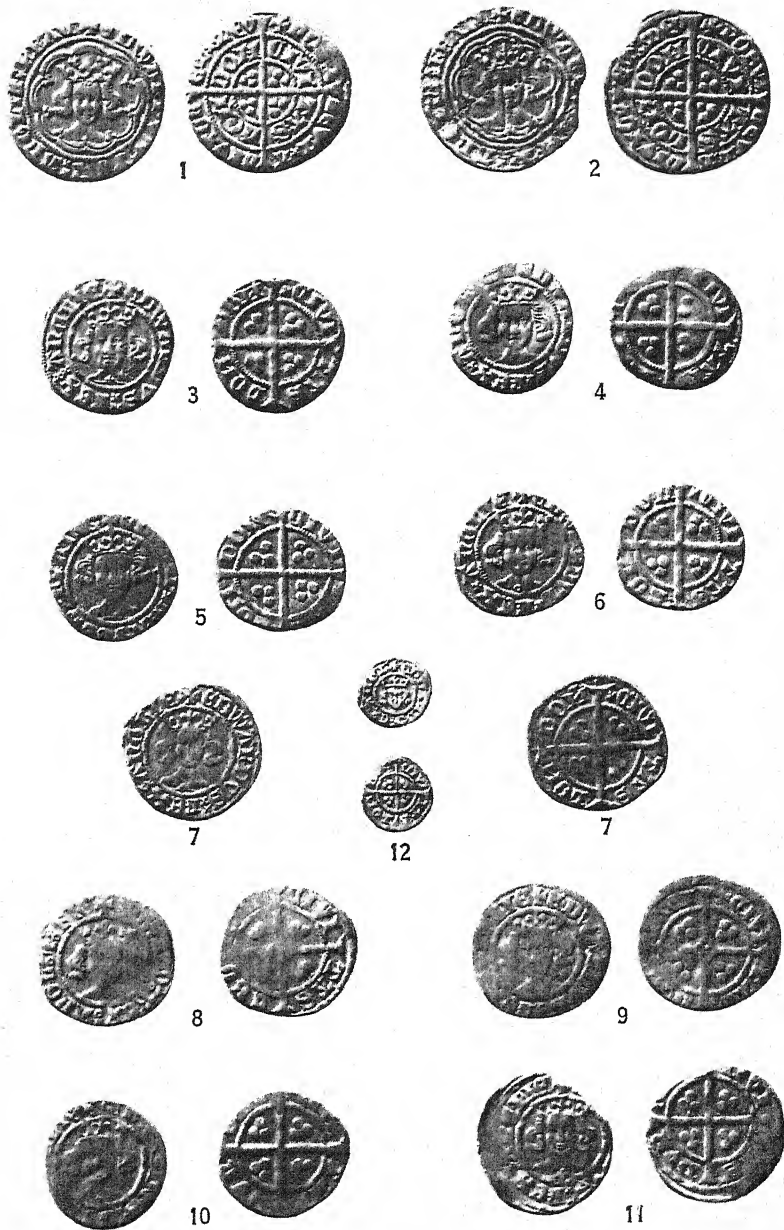
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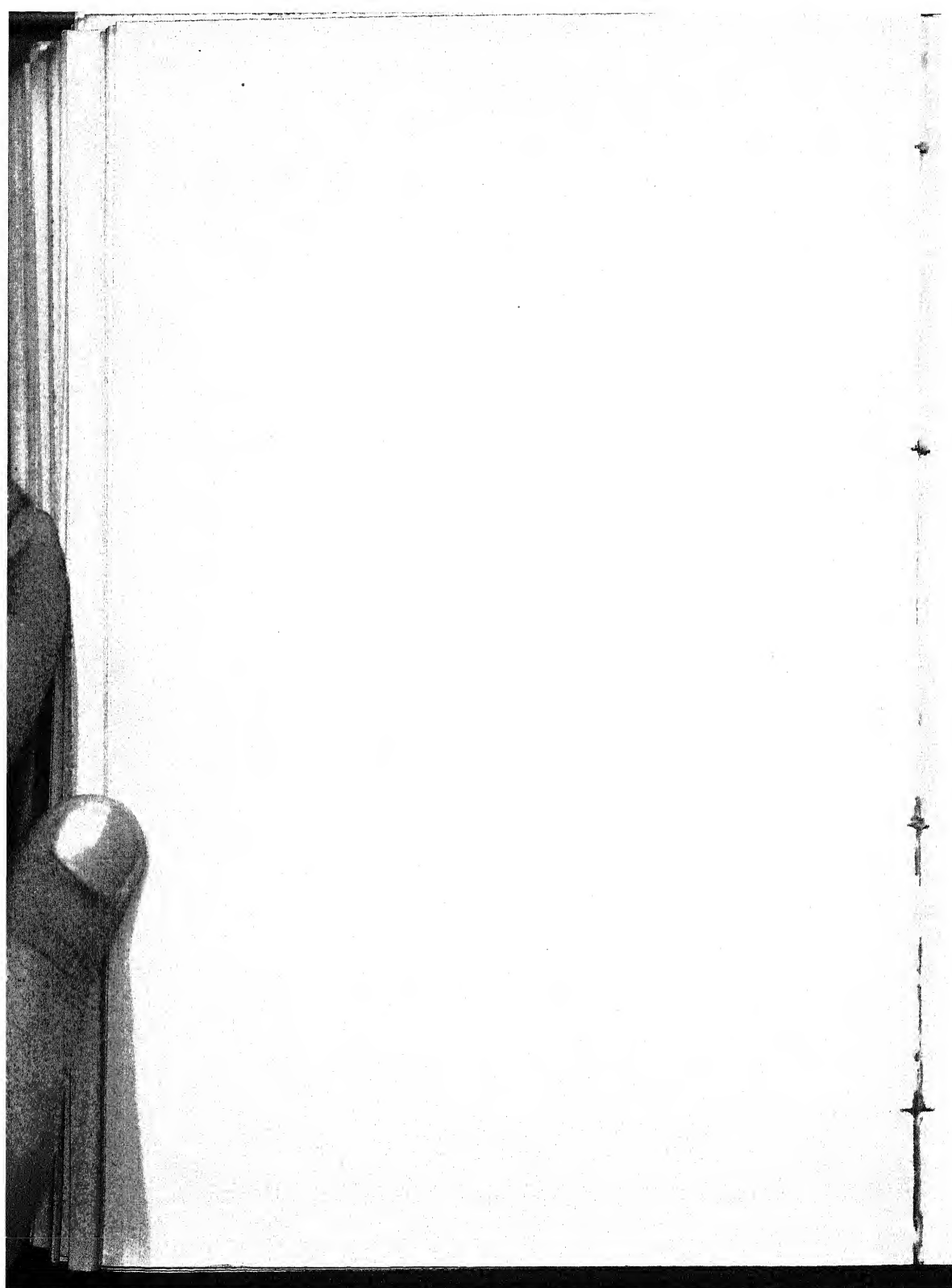


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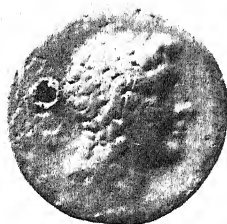
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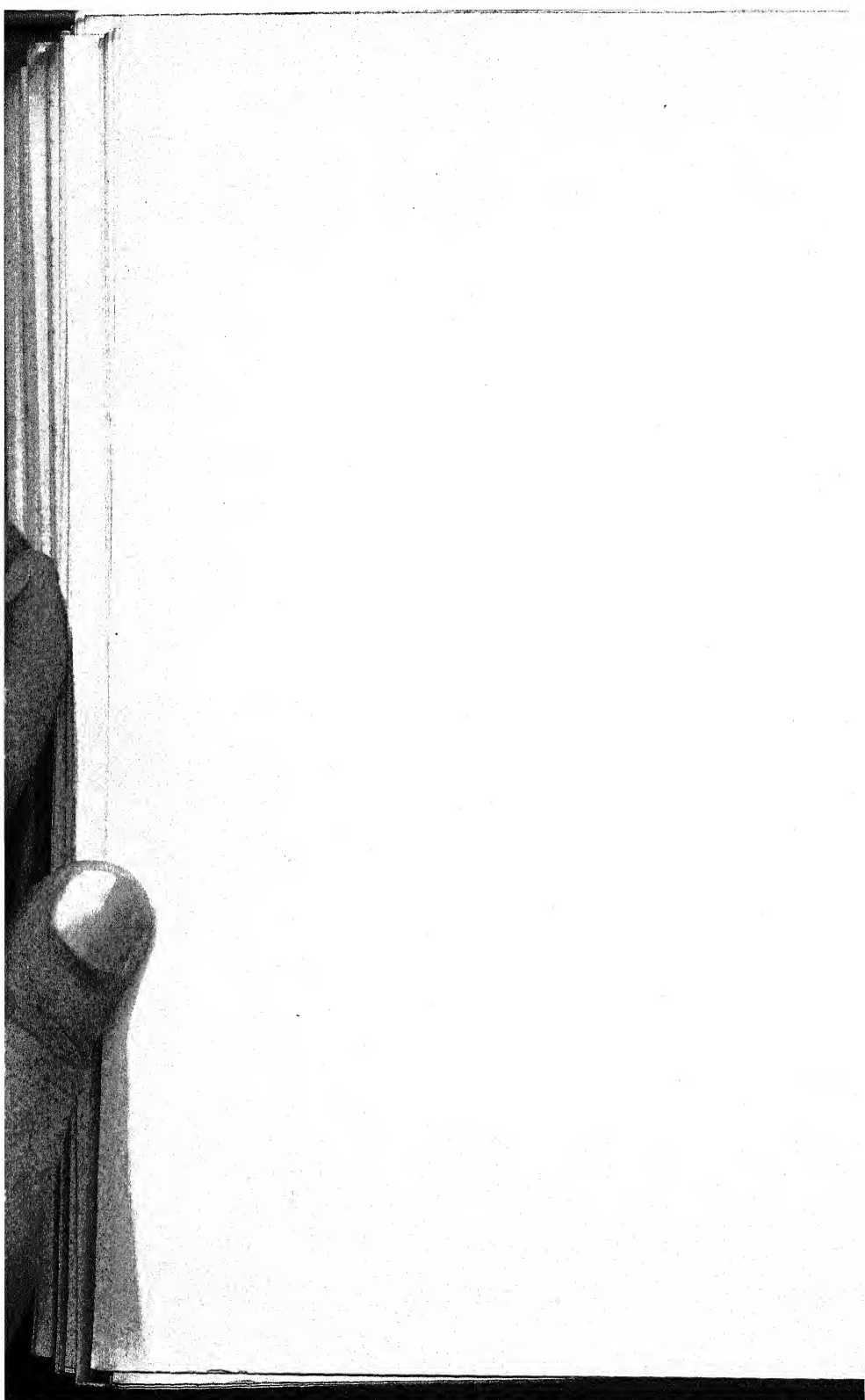


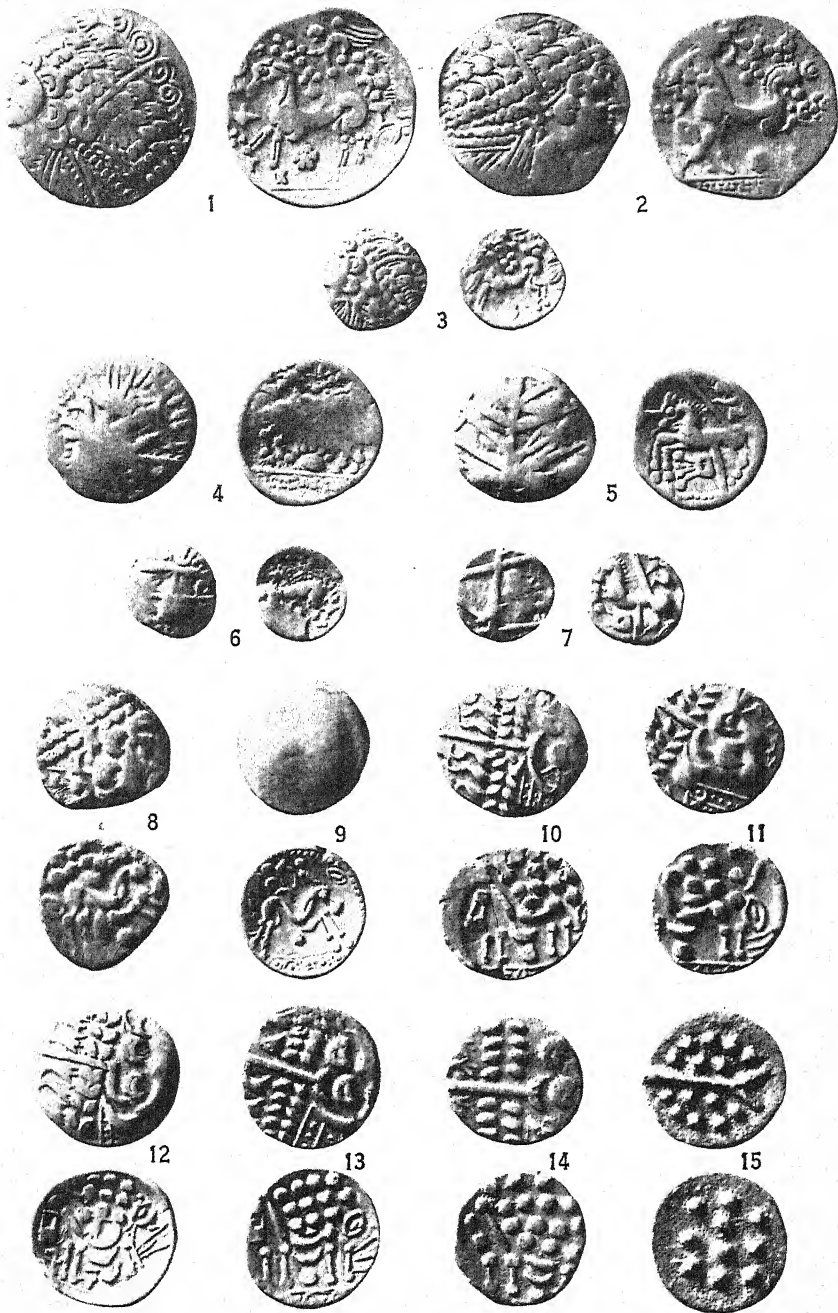
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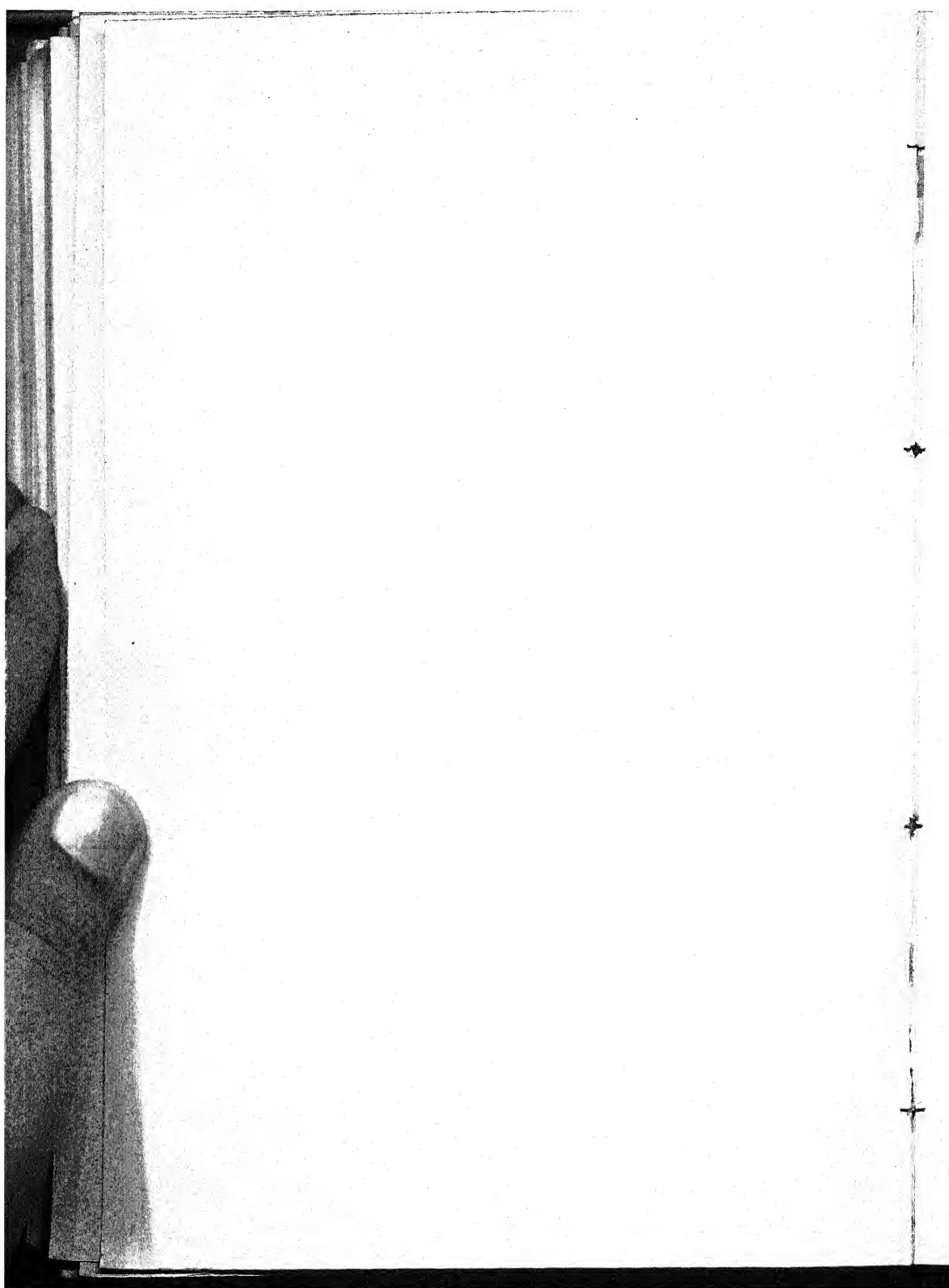
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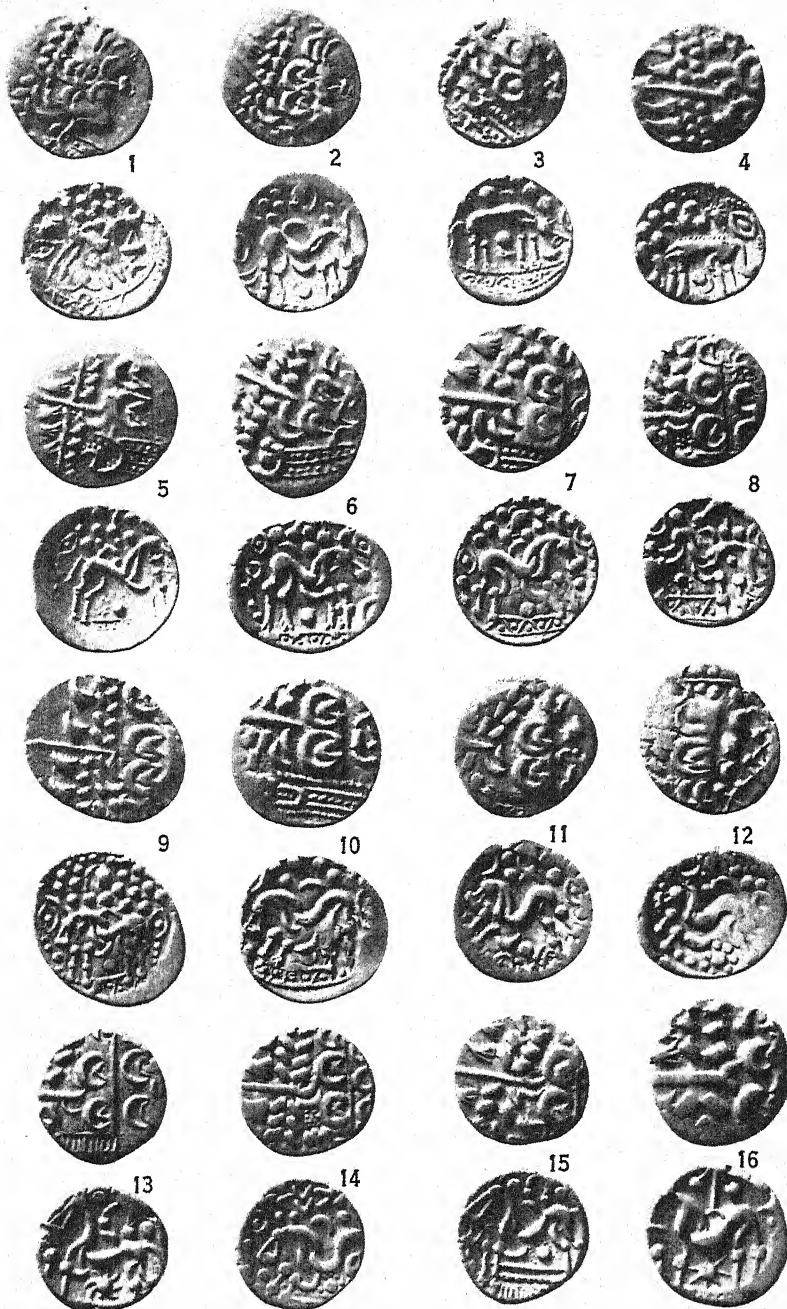




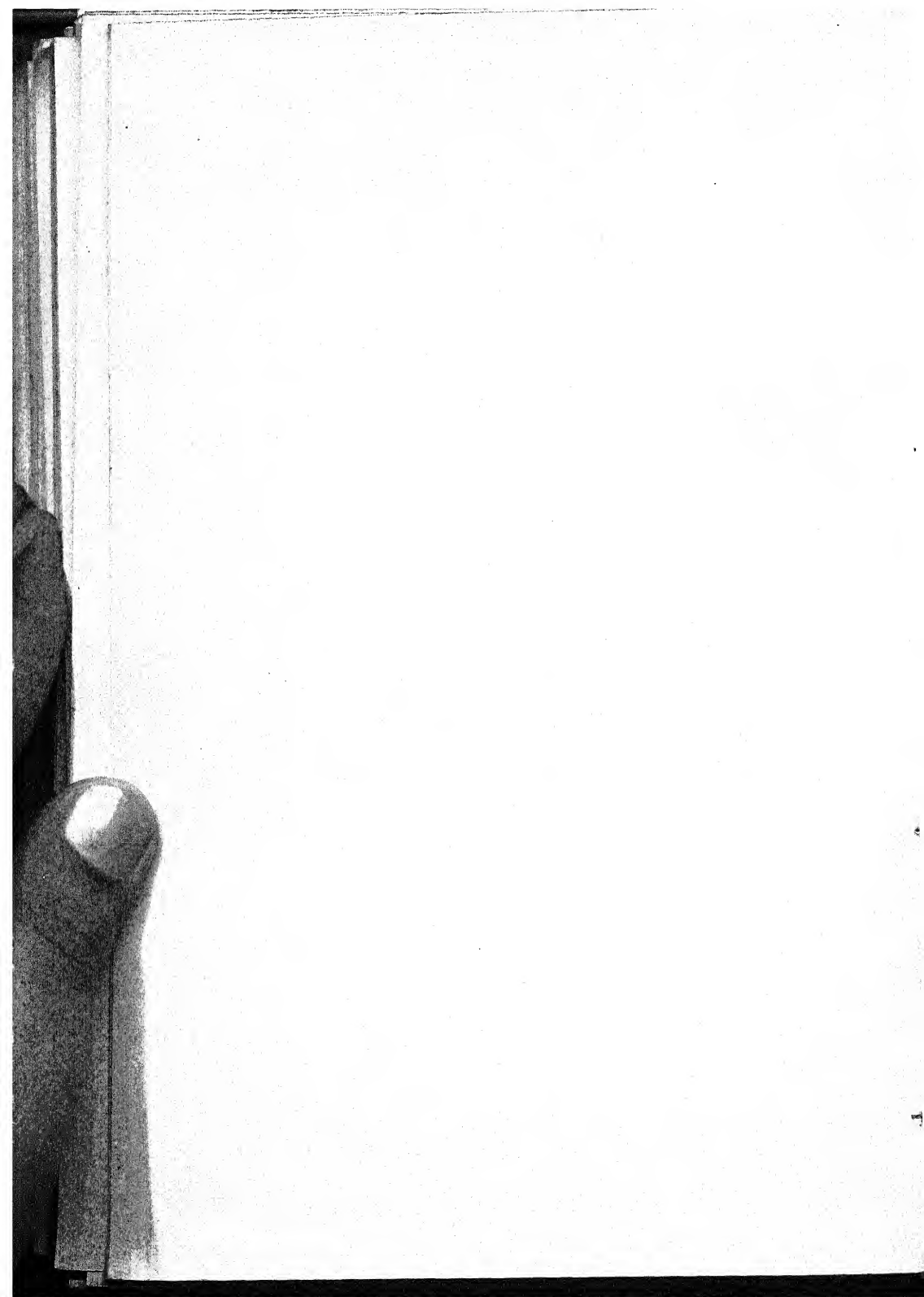


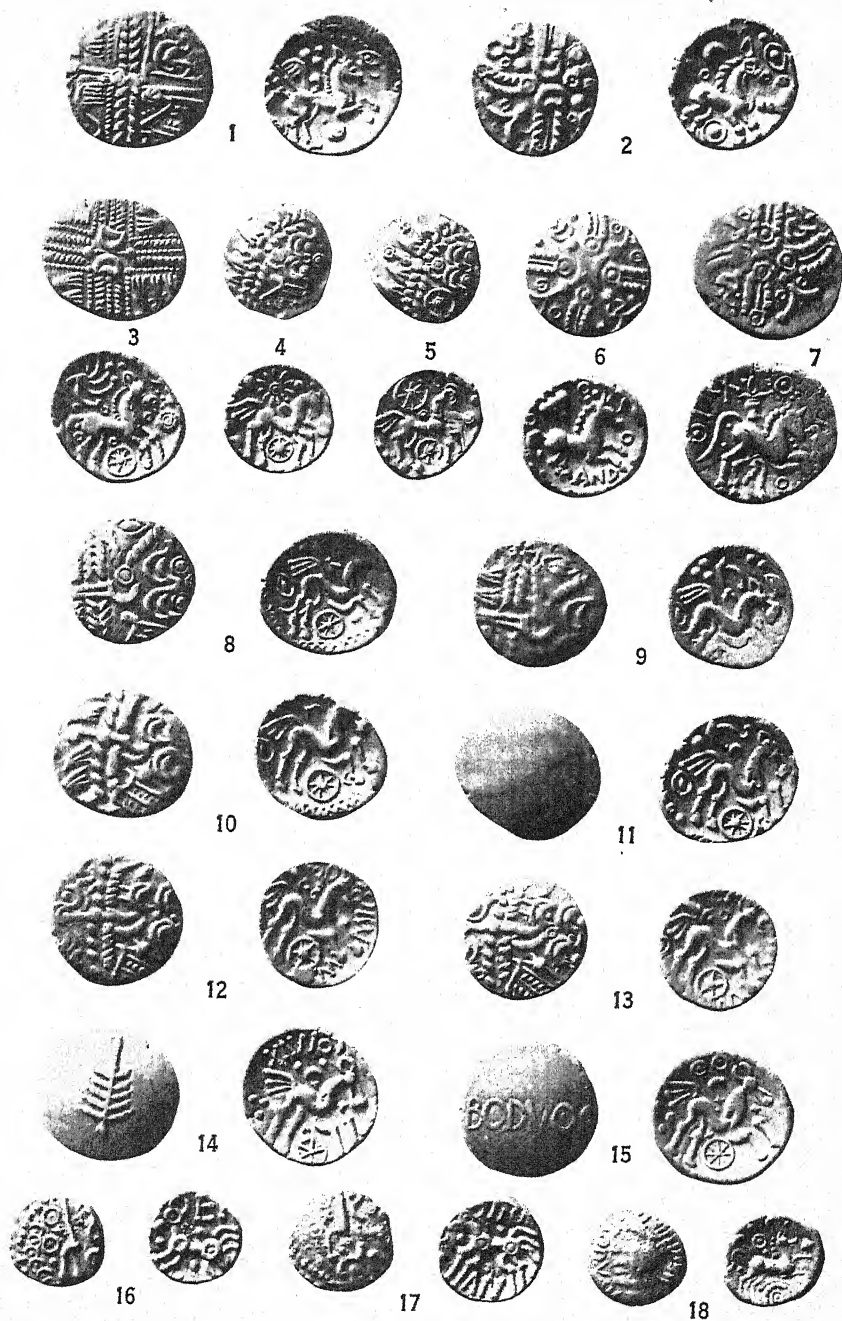
GAULISH AND BRITISH COINS

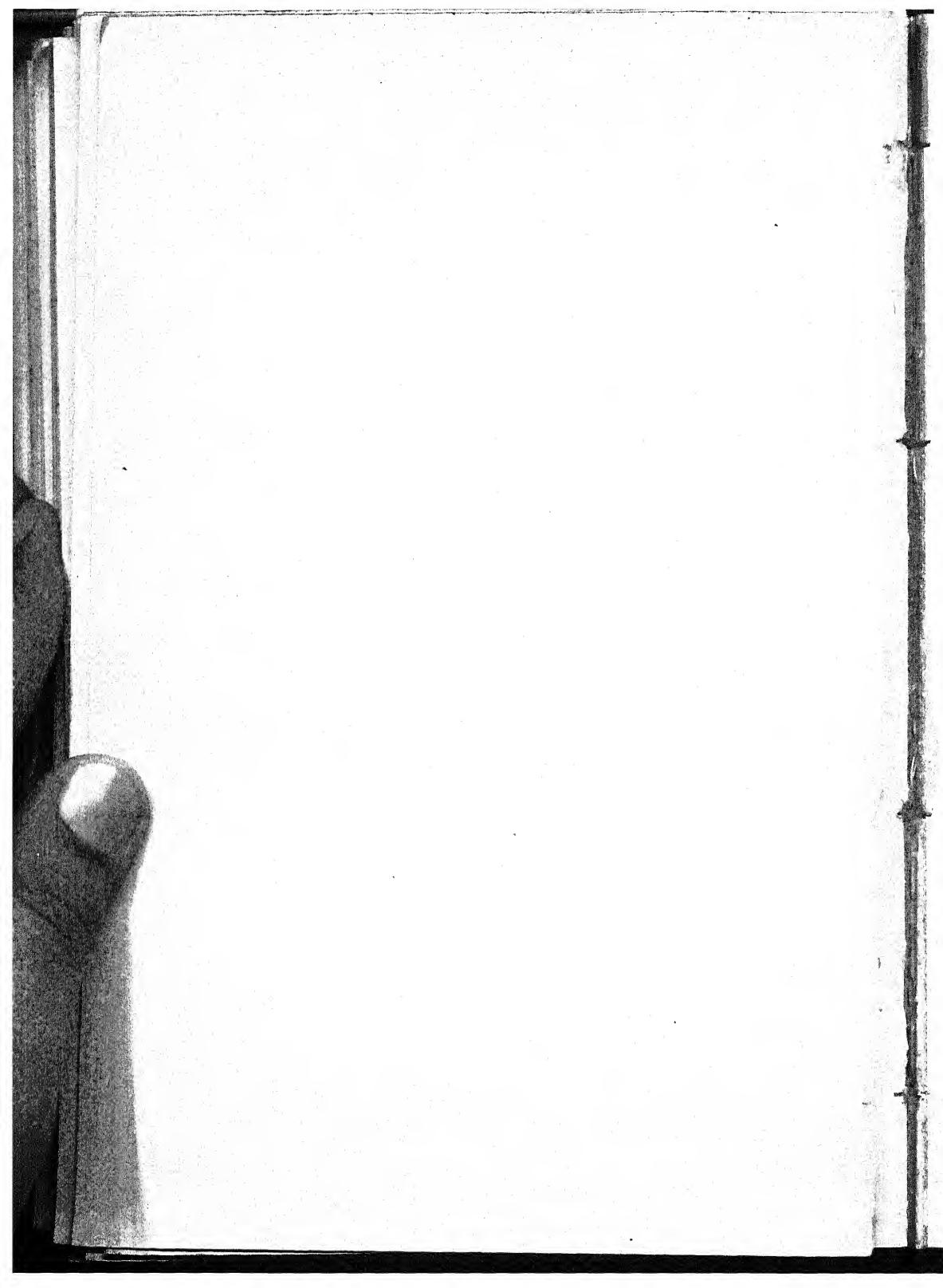




BRITISH COINS (EASTERN COUNTIES)









TERLING HOARD 1



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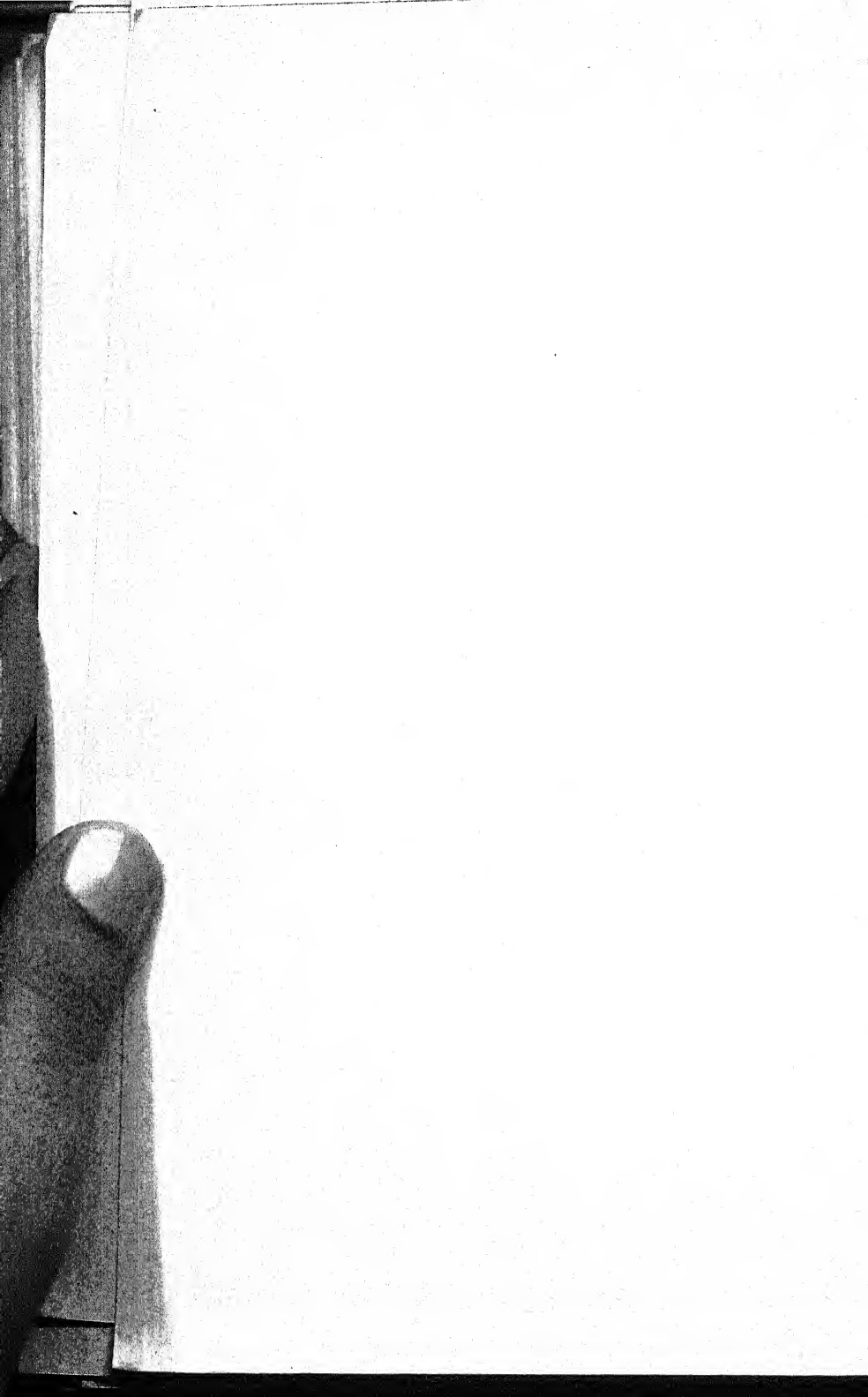


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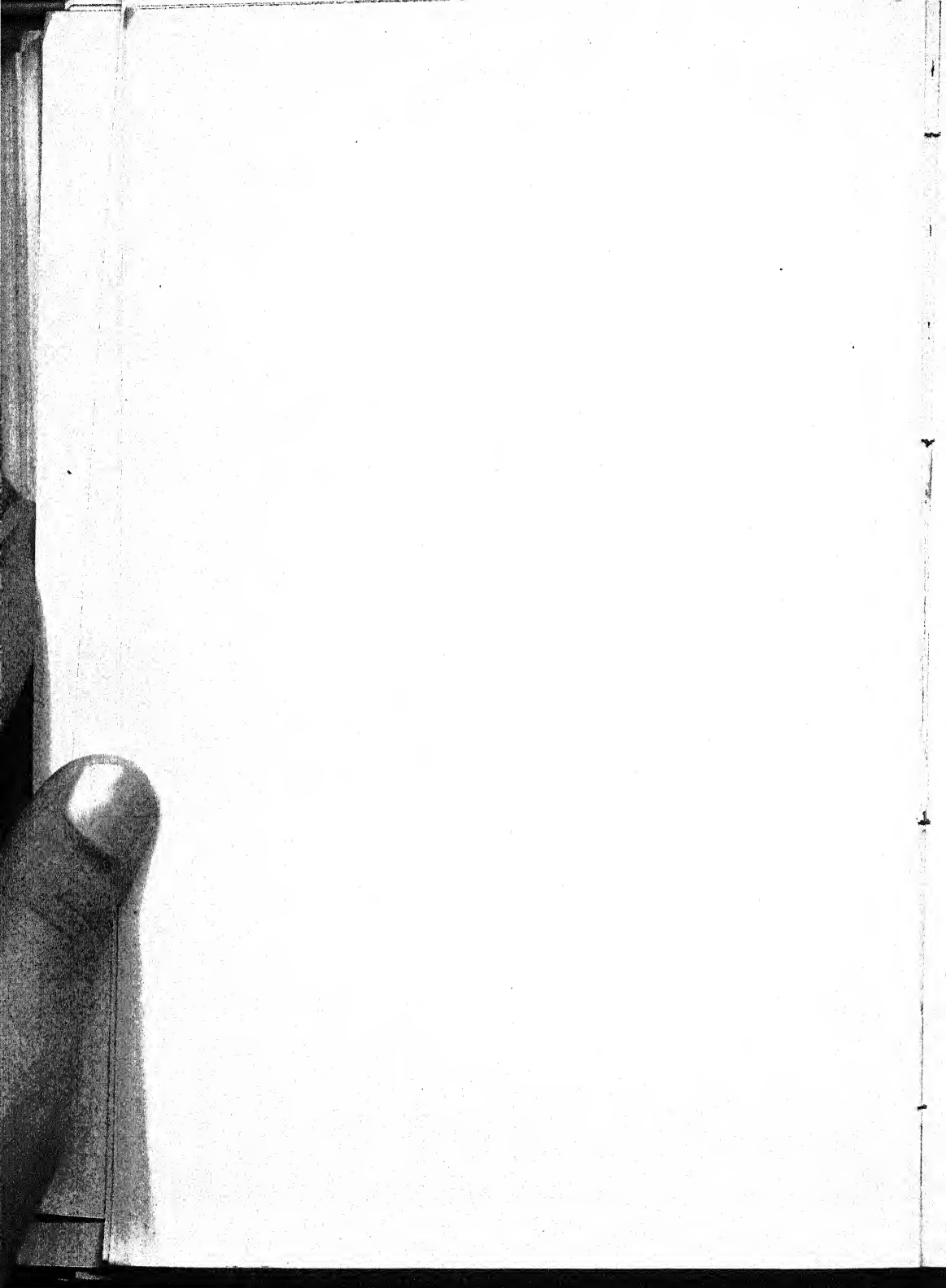
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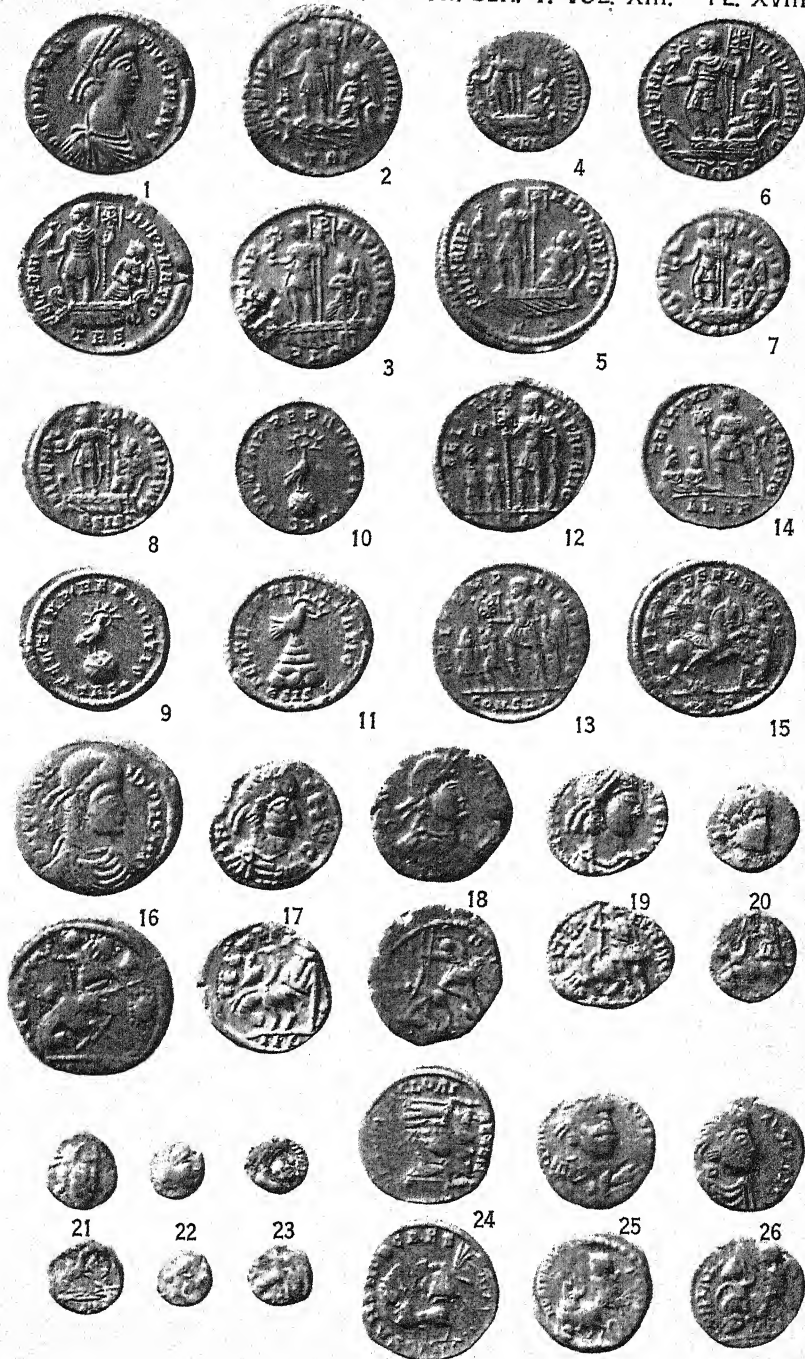


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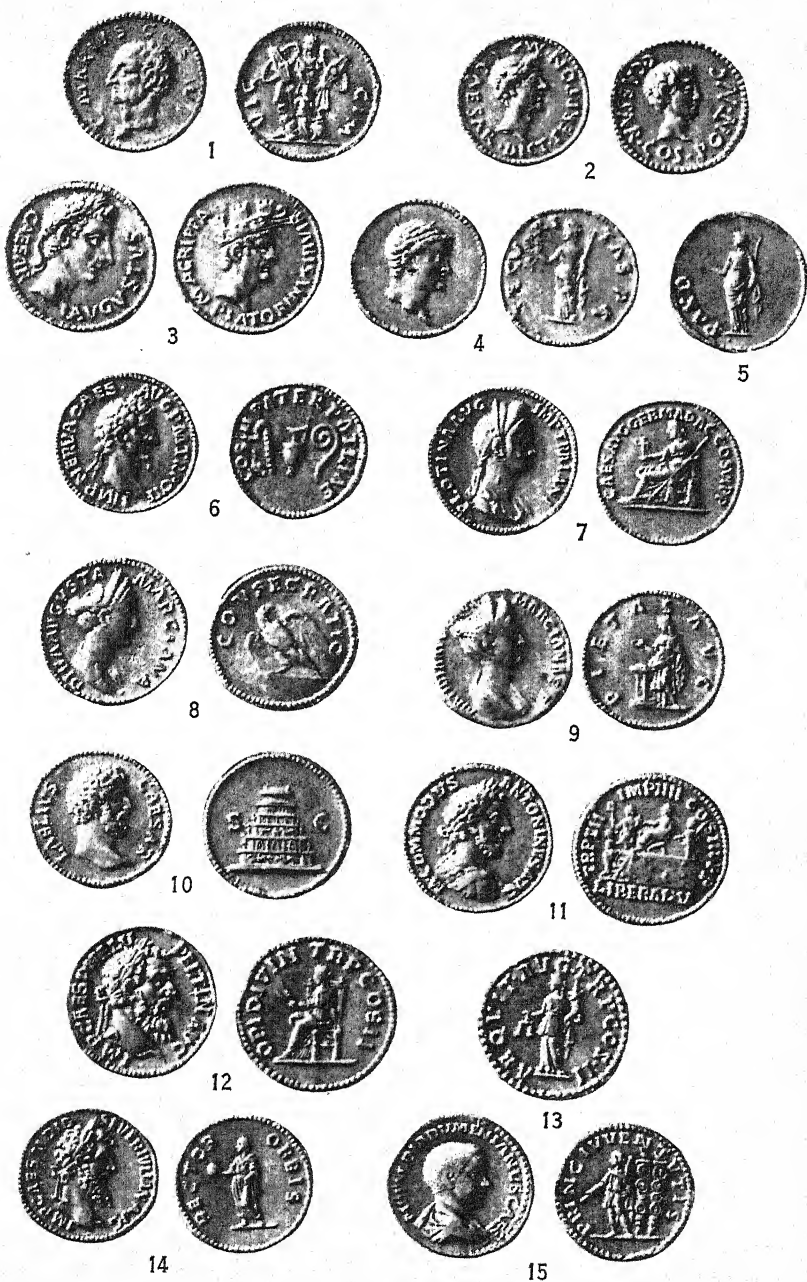


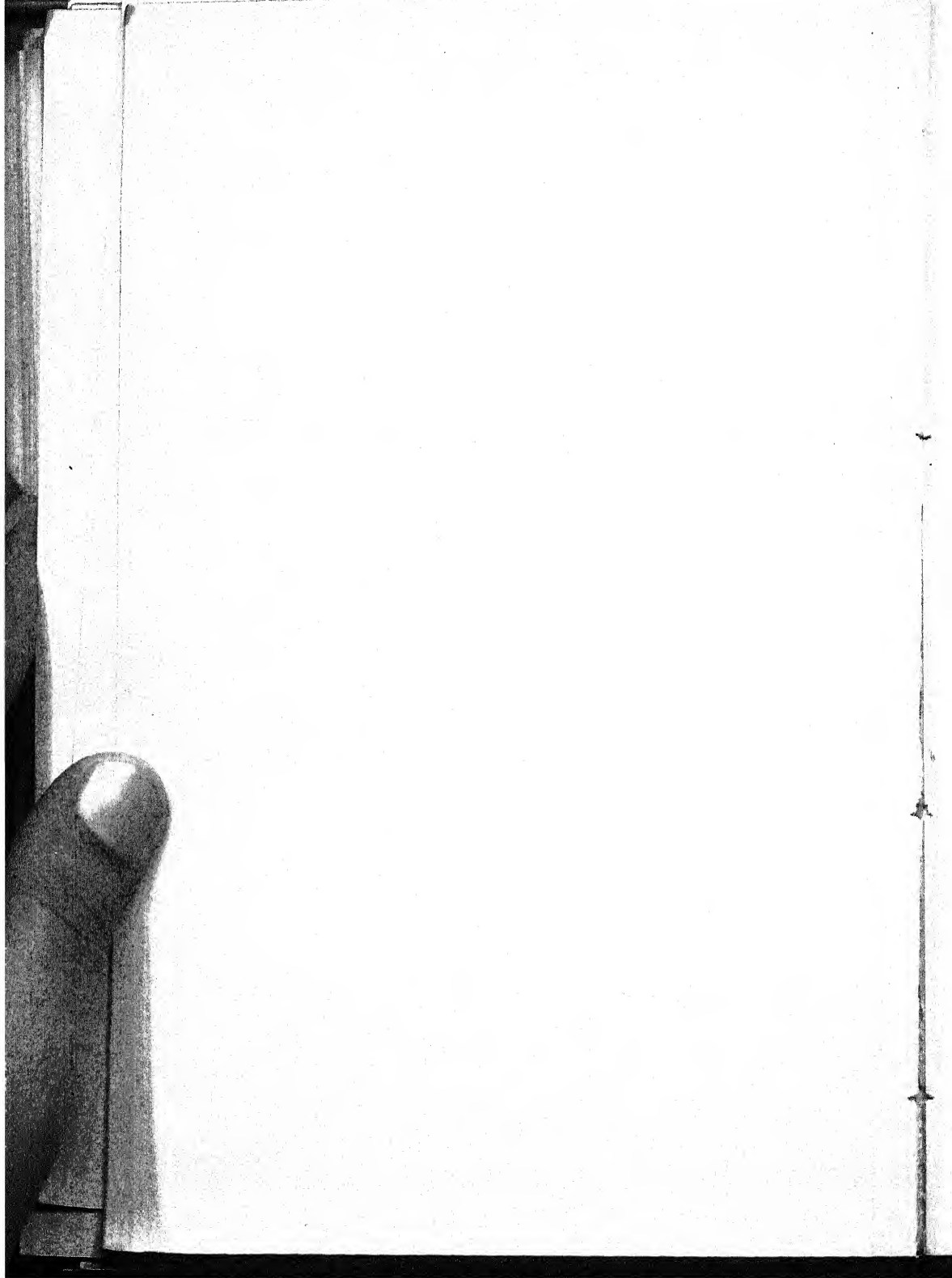
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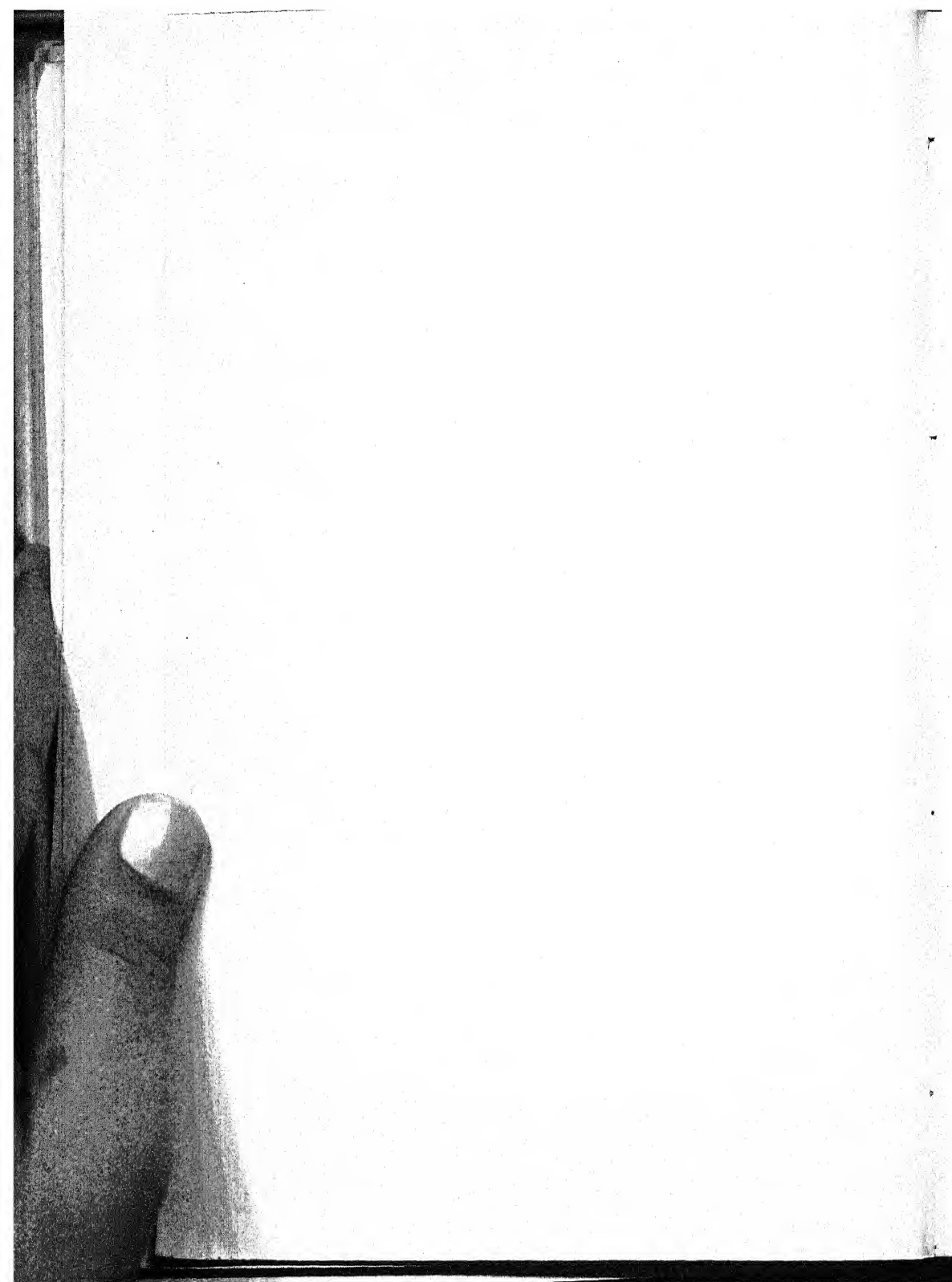


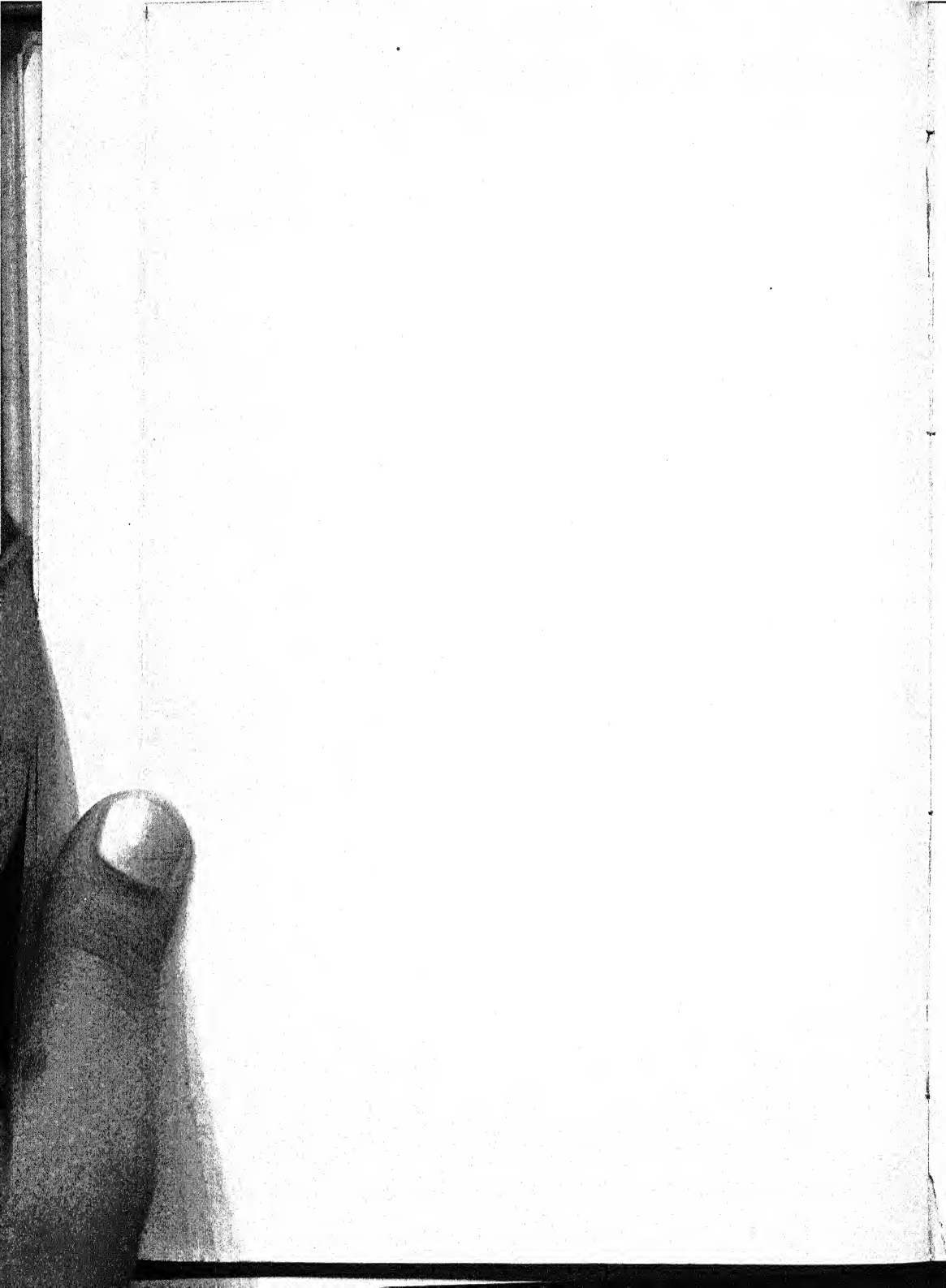
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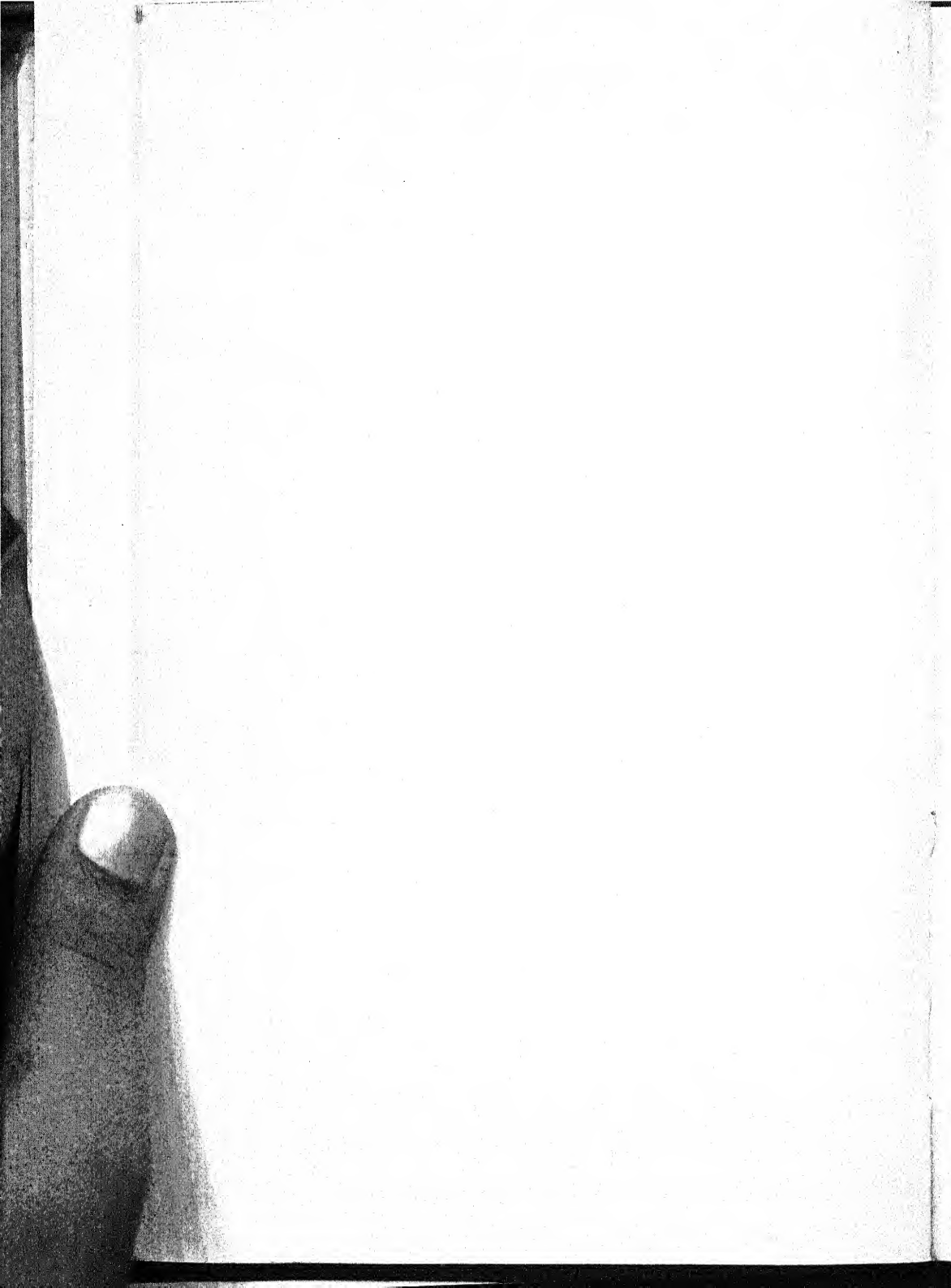
THE ARRAS HOARD. 1













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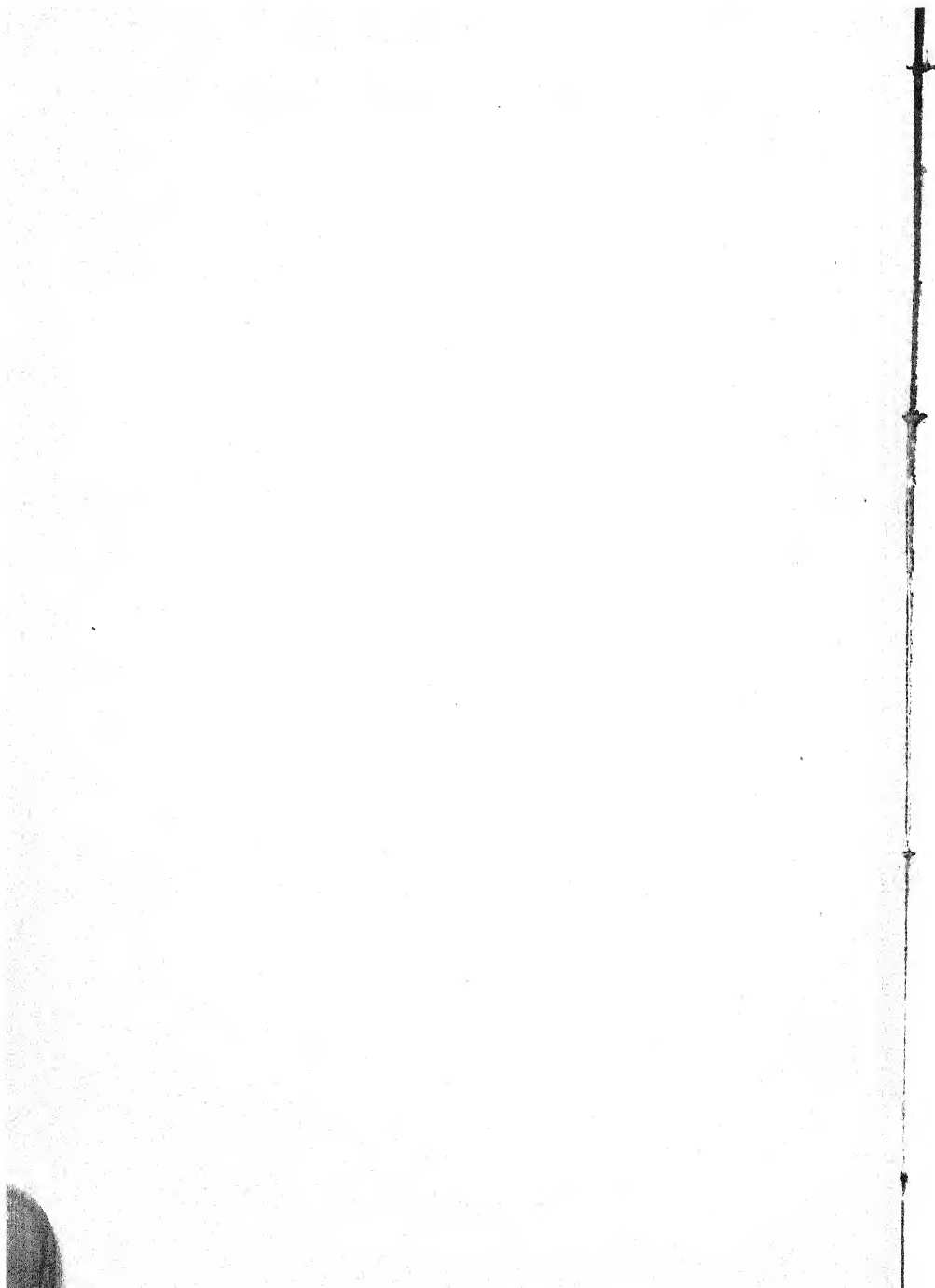
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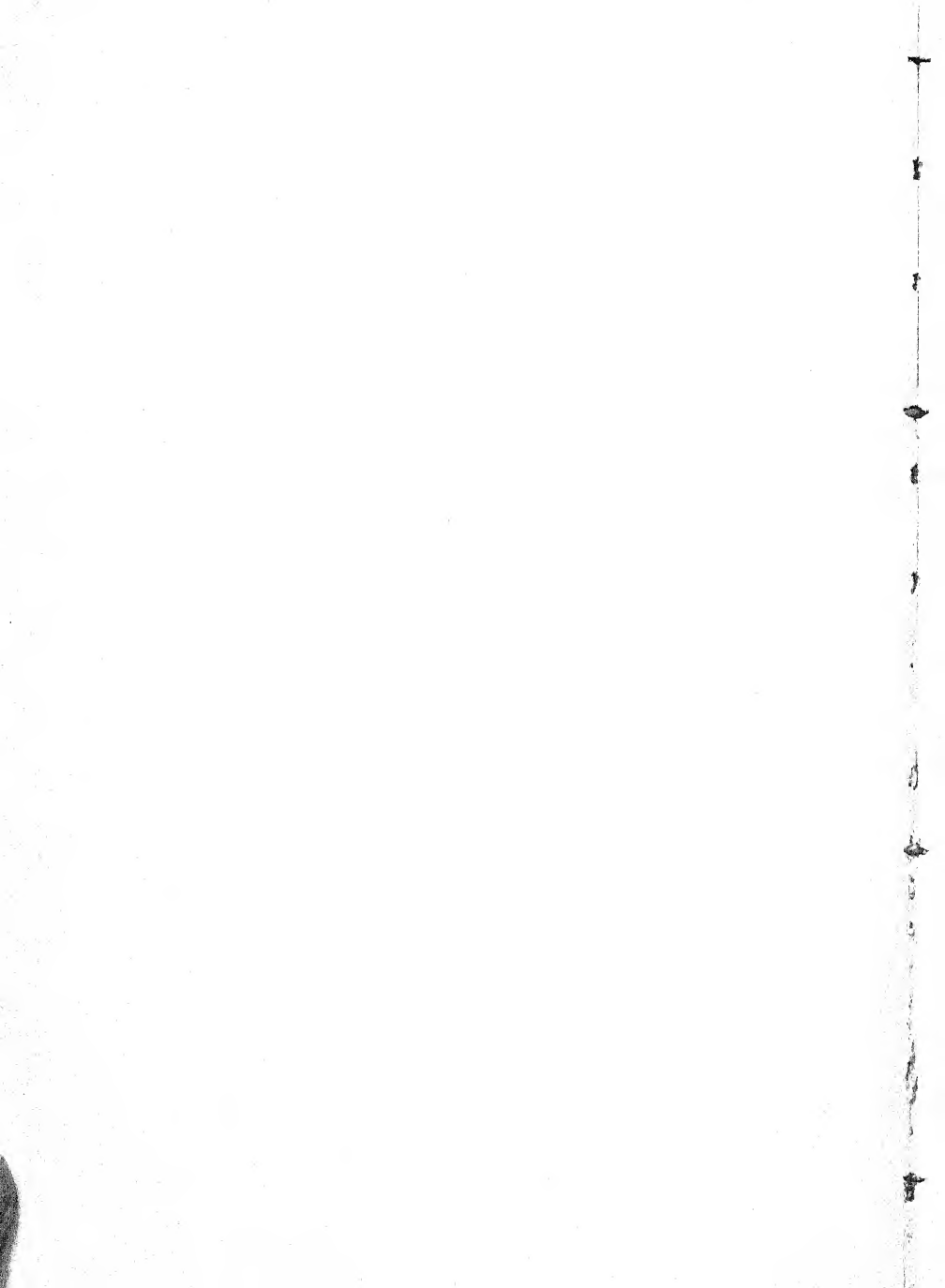
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LIST OF FELLOWS
OF THE
ROYAL
NUMISMATIC SOCIETY
1933



PATRON

HIS MAJESTY THE KING

LIST OF FELLOWS

OF THE

ROYAL

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- 1888 MONTAGUE, LIEUT.-COL. L. A. D., Penton, near Crediton, Devon.
- 1904 MOULD, RICHARD W., Esq., Newington Public Library, Walworth Road, S.E. 17.
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- 1930 NORTHUMBERLAND, THE DUKE OF, 17 Princes Gate, S.W. 7.
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 1911 WARRE, FELIX W., Esq., O.B.E., M.C., 128 Church Street,
 W. 8.
 1920 *WATSON, COMMANDER HAROLD NEWALL, R.N., Belmont,
 10 Curzon Park, Chester.
 1901 *WATTERS, CHARLES A., Esq., Springfields, Park Road,
 Hayton, Liverpool.

ELECTED

- 1901 WEBB, PERCY H., Esq., M.B.E., 4 and 5 West Smithfield, E.C. 1, *President*.
- 1885 *WEBER, F. PARKES, Esq., M.D., F.S.A., 13 Harley Street, W. 1.
- 1932 WERNSTROM, ERNEST, Esq., P.O. Box 384, San Francisco, U.S.A.
- 1920 *WHEELER, ERNEST H., Esq., 36 Shepherds Hill, N. 6.
- 1915 WHITEHEAD, R. B., Esq., M.A., M.R.A.S., I.C.S. (retd.), 30 Millington Road, Cambridge.
- 1908 WILLIAMS, T. HENRY, Esq., 15 Stanwick Road, W. 14.
- 1910 WILLIAMS, W. I., Esq., Bryn Deri, Hereford Road, Abergavenny.
- 1906 WOOD, HOWLAND, Esq., Curator of the American Numismatic Society, 156th Street, W. of Broadway, New York, U.S.A.
- 1933 WOOD, MISS MARGARET ENVYS, 1 Devonshire Street, W. 1.
- 1920 *WOODWARD, A. M. TRACEY, Esq., Chateau Millefleurs, Cadaujac, Gironde, France.
- 1920 WOODWARD, W. H., Esq., 702 Chateau St. Louis, Grande Allée, Quebec, Canada.
- 1903 WRIGHT, H. NELSON, Esq., I.C.S. (retd.), 42 Ravenscroft Avenue, N.W. 11.
- 1933 WÜTHRICH, G., Esq., M.I.E.E., 81 Pursers Cross Road, S.W. 6.
- 1920 WYMAN, ARTHUR CRAWFORD, Esq., 29 Place Dauphine, Paris I.
- 1922 YOANNA, A. DE, Esq., B.A., M.D., 111 Pierrepont Street, Brooklyn, New York, U.S.A.
- 1932 YORKSHIRE ARCHAEOLOGICAL SOCIETY, 10 Park Street, Leeds.
- 1880 YOUNG, ARTHUR W., Esq., 12 Hyde Park Terrace, W. 2.
- 1919 ZIEGLER, PHILIP, Esq., Lilly Villa, Victoria Park, Manchester.

HONORARY FELLOWS

ELECTED

- 1898 HIS MAJESTY VICTOR EMMANUEL III, KING OF ITALY,
Palazzo Quirinale, Rome.
- 1930 ALFÖLDI, PROFESSOR ANDREAS, Ferencz Jozef Rakpart 25,
Budapest.
- 1903 BAHRFELDT, GENERAL DER INFANTERIE A. D., PROFESSOR
MAX VON, Dr.Phil., Zinksgarten-Strasse 2, Halle (Saale),
Germany.
- 1898 BLANCHET, Monsieur ADRIEN, Membre de l'Institut, 10 Bd.
Émile Augier, Paris XVI.
- 1926 DIEUDONNÉ, MONSIEUR A., Conservateur des Médailles,
Bibliothèque Nationale, Paris.
- 1899 GABRICI, PROFESSOR DR. ETTORE, Via Formale 30, Naples.
- 1904 KUBITSCHKEK, PROFESSOR J. W., Pichlergasse 1, Vienna IX.
- 1932 LAFFRANCHI, SIGNOR L., 14 Via Ausonio, Milan.
- 1904 MAURICE, M. JULES, 15 Rue Vaneau, Paris VII.
- 1899 PICK, DR. BEHRENDT, Münzkabinett, Gotha.
- 1932 REGLING, PROF. DR. KURT, Kaiser Friedrich Museum,
Berlin.
- 1926 TOURNEUR, PROFESSOR VICTOR, Conservateur des Médailles,
Bibliothèque Royale, Brussels.

MEDALLISTS

OF THE ROYAL NUMISMATIC SOCIETY

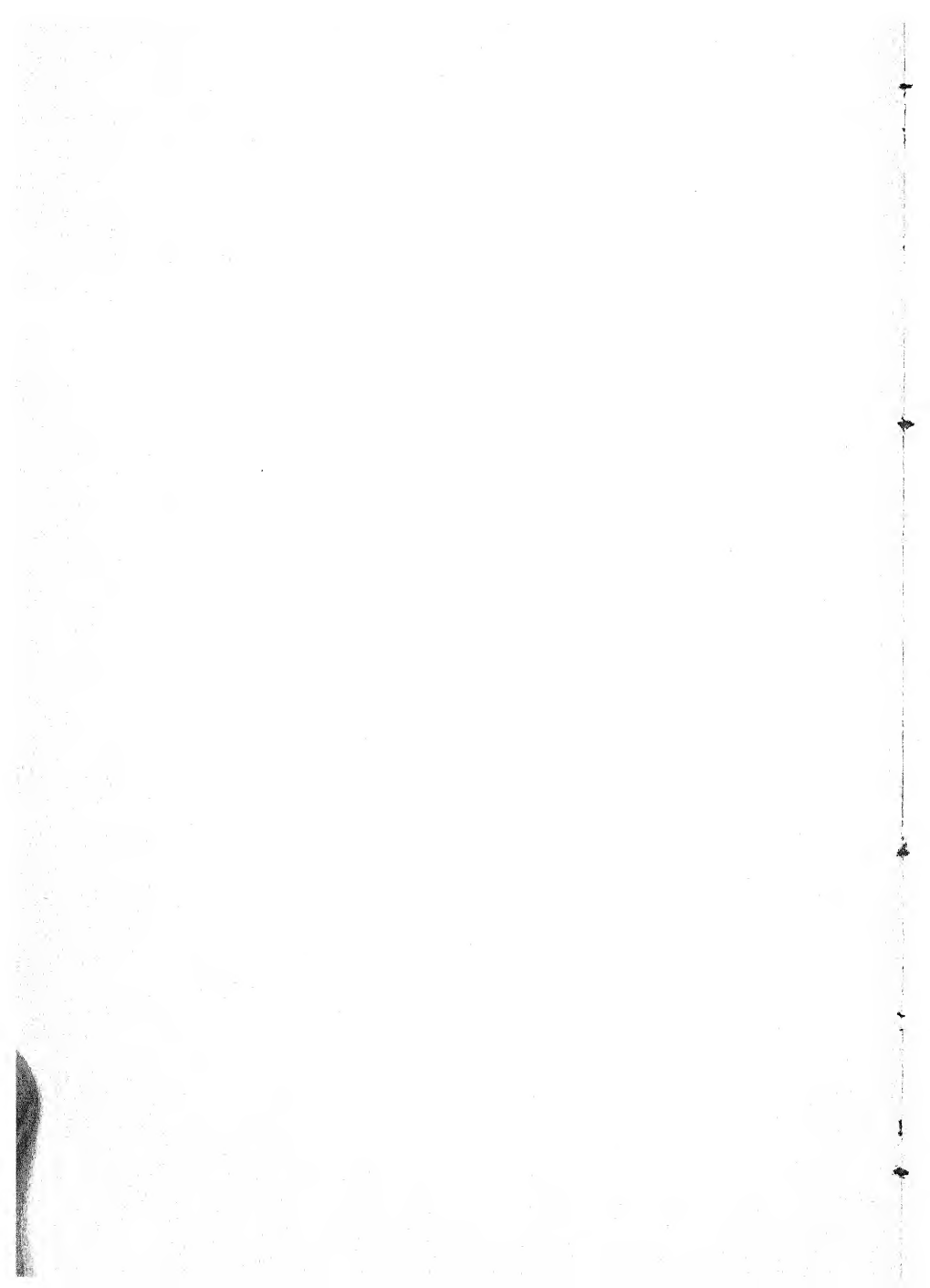
ELECTED

- 1883 CHARLES ROACH SMITH, Esq., F.S.A.
- 1884 AQUILLA SMITH, Esq., M.D., M.R.I.A.
- 1885 EDWARD THOMAS, Esq., F.R.S.
- 1886 MAJOR-GENERAL ALEXANDER CUNNINGHAM, C.S.I., C.I.E.
- 1887 JOHN EVANS, Esq., D.C.L., LL.D., F.R.S., P.S.A.
- 1888 DR. F. IMHOOF-BLUMER, Winterthur.
- 1889 PROFESSOR PERCY GARDNER, Litt.D., F.S.A.
- 1890 MONSIEUR J. P. SIX, Amsterdam.
- 1891 DR. C. LUDWIG MÜLLER, Copenhagen.
- 1892 PROFESSOR R. STUART POOLE, LL.D.
- 1893 M. W. H. WADDINGTON, Sénateur, Membre de l'Institut, Paris.
- 1894 CHARLES FRANCIS KEARY, Esq., M.A., F.S.A.
- 1895 PROFESSOR DR. THEODOR MOMMSEN, Berlin.
- 1896 FREDERIC W. MADDEN, Esq., M.R.A.S.
- 1897 DR. ALFRED VON SALLET, Berlin.
- 1898 THE REV. CANON W. GREENWELL, M.A., F.R.S., F.S.A.
- 1899 M. ERNEST BABELON, Membre de l'Institut, Paris.
- 1900 PROFESSOR STANLEY LANE-POOLE, M.A., Litt.D.
- 1901 S. E. BARON WLADIMIR VON TIESENHAUSEN, St. Petersburg.
- 1902 ARTHUR J. EVANS, Esq., M.A., F.R.S., F.S.A.
- 1903 M. GUSTAVE SCHLUMBERGER, Membre de l'Institut, Paris.
- 1904 HIS MAJESTY VICTOR EMMANUEL III, KING OF ITALY.
- 1905 SIR HERMANN WEBER, M.D.
- 1906 COMM. FRANCESCO GNECCHI, Milan.
- 1907 BARCLAY V. HEAD, Esq., D.Litt., D.C.L., Ph.D., Corr. de l'Inst.
- 1908 PROFESSOR DR. HEINRICH DRESSSEL, Berlin.
- 1909 HERBERT A. GRUEBER, Esq., F.S.A.
- 1910 DR. FRIEDRICH EDLER VON KENNER, Vienna.
- 1911 OLIVER CODRINGTON, Esq., M.D., M.R.A.S., F.S.A.
- 1912 GENERAL-LEUTNANT MAX VON BAHRFELDT, Hildesheim.
- 1913 GEORGE MACDONALD, Esq., M.A., LL.D.
- 1914 JEAN N. SYRONOS, Athens.
- 1915 GEORGE FRANCIS HILL, Esq., M.A.
- 1916 M. THÉODORE REINACH, Membre de l'Institut, Paris.
- 1917 L. A. LAWRENCE, Esq., F.S.A.
- 1918 Not awarded.
- 1919 M. ADRIEN BLANCHET, Membre de l'Institut, Paris.
- 1920 H. B. EARLE-FOX, Esq., and J. S. SHIRLEY-FOX, Esq.
- 1921 PERCY H. WEBB, Esq.
- 1922 FREDERICK A. WALTERS, Esq., F.S.A.
- 1923 PROFESSOR J. W. KUBITSCHKE, Vienna.
- 1924 HENRY SYMONDS, Esq., F.S.A.
- 1925 EDWARD T. NEWELL, Esq., New York.

ELECTED

- 1926 R. W. MACLACHLAN, Esq., Montreal.
1927 M. A. DIEUDONNÉ, Paris.
1928 SIR CHARLES OMAN, K.B.E., M.P., D.C.L., F.B.A.
1929 MONSIEUR JULES MAURICE, Paris.
1930 REV. EDWARD A. SYDENHAM, M.A.
1931 MISS HELEN FARQUHAR.
1932 H. NELSON WRIGHT, Esq., I.C.S. (retd.).
1933 DIREKTOR PROFESSOR KURT REGLING, Berlin.

PROCEEDINGS OF THE
ROYAL NUMISMATIC SOCIETY.



PROCEEDINGS OF THE ROYAL NUMISMATIC SOCIETY.

SESSION 1932—1933.

OCTOBER 20, 1932.

PERCY H. WEBB, Esq., M.B.E., President, in the Chair.

The Minutes of the last Meeting were read and approved.

Presents to the Society were announced, and thanks ordered to be sent to their donors.

Messrs. James R. Stewart and Cornelius M. Spink were proposed for election.

Mr. William Gilbert exhibited an aureus of Plautilla the wife of Caracalla. Struck at Antioch. (Cohen 6.) Weight 110 grains. *Rev.* CONCORDIAE, Abundance seated to the left. In view of the excessive rarity of any gold coin of this empress, the perfect condition of this specimen is remarkable.

The President showed an early Treaty noble of Edward III.

Mr. Henry Garside exhibited Portuguese silver ten, five, and two and a half escudos all dated 1932, and nickel escudo dated 1928, and a Jersey bronze twelfth of a shilling dated 1931 with new reverse designed by Mr. C. Kruger Gray.

Mr. Lawrence continued his description of the coinage of Edward III. The Treaty coinages from 1361 to 1362 were first considered. These consisted of the complete set both in gold and silver. To the latter class Mr. Lawrence was able to add the farthing, a unique specimen of which he showed. A description of the stops on the groats included saltires on both sides, annulets on the obverse. The mark before Edward, an annulet on both gold and silver, served to

connect the two metals and was shown to be the last issue of the Treaty coins, and mules are known of this and the post-Treaty (1369-77) issues. This led to a short description of the later coinage when the French title was restored to the coinage. The rare four-title groat and the Di Gra half-groat were referred to, and also the farthing. No quarter nobles or halfpence were stated to be known. The story was illustrated with lantern slides. Mr. Lawrence showed a fine series of coins to illustrate the paper. (This paper is printed in this volume of the *Numismatic Chronicle*.)

NOVEMBER 19, 1932.

PERCY H. WEBB, Esq., M.B.E., President, in the Chair.

The Minutes of the last Meeting were read and approved.

Presents to the Society were announced, and thanks ordered to be sent to their donors.

Messrs. James R. Stewart and Cornelius M. Spink were elected Fellows of the Society.

Rev. Arnold Mallinson read a note on a hitherto unknown rose-marked sovereign of Queen Elizabeth in the Ashmolean Museum. (This paper is published in this volume of the *Numismatic Chronicle*.)

The remainder of the evening was devoted to exhibitions.

Mr. Henry Garside exhibited a set of 2 and 1 mark, 50 and 20 pfennig porcelain coins of Saxony 1921 and the rupee and quarter rupee struck by the Chinese Emperor Kuang Hsü for the province of Sze-Chüan to compete against the Indian rupee in Tibet. The quarter rupee is a piece of extraordinary rarity.

Dr. G. C. Brooke showed photographs of a gold badge commemorating Admiral Rodney's victory of April 1782 and the capture of the French flagship *La Ville de Paris*, and of Pistrucci's design for the St. George and Dragon for the sovereign of 1817, both recently acquired by the British Museum.

Mr. H. W. Taffs showed a fine series of English and Irish siege-pieces and foreign siege and counter-marked pieces and Swedish plate money 1 daler, 1745.

Mr. Mallinson showed a louis d'or of 1716 of the Paris mint not overstruck on a coin of Louis XIV, which is unusual.

Mr. Fredk. A. Harrison showed a series of Continental groats and pieces of similar denomination of the thirteenth century.

Dr. Sidney H. Fairbairn showed a cast medal of a bell-metal from the Barnabite Church in Paris, probably a badge of the workmen employed to make coins there from bell metal, also a series of nineteenth- and late eighteenth-century Italian and Swiss coins including some pieces of Geneva showing the influence of the French revolution and a piece counter-marked "BOMBA".

Mr. A. H. F. Baldwin exhibited a denarius of Augustus and Agrippa, a quinarius of Julia Paula, a denarius of Diadumenianus, and a siliqua of Priscus Attalus.

Mr. J. W. E. Pearce, F.S.A., showed siliquae of Valens of the *Urbs Roma* type from the same die with mint-marks TRPS and TRPS.

Sir Charles Oman showed two unpublished coins of Carausius: *rev.* **CONCORDIA AVGGG**, two emperors shaking hands, and **ADVENT. AVG.**, four military standards. He also showed two denarii of Constantine I as Caesar; one of Rome with bearded head, probably struck by Maxentius before his real portrait was known, and the other with shaven head of Treves, **VIRTVS MILITVM**; he also showed a quinarius corresponding to the latter and a denarius of Faustina I, *rev.* **SALVS AVG**, Salus with altar and snake.

Mr. William Gilbert showed a fine aureus of Delmatius (Cohen 15), *rev.* **PRINCIPI IVVENTVTIS** of the highest rarity.

Mr. V. J. E. Ryan showed a series of Roman coins, an aureus of Lucilla, *rev.* **VENVS** (Coh. 69) from the same dies as the British Museum (Wigan) specimen, and therefore before the time of the forger alleged to have made a number of coins of this type: he also showed an *as* of Vespasian **IMP CAESAR VESPASIAN AVG COS IIII. Rev. PROVIDEN. S. C.** temple; an *as* of Galba, a variety of *M. and S.* no. 61, Pax holding caduceus and branch; a sestertius of Vitellius, *rev.* **MARS VICTOR** with an *obv.* reading **GERMA** which appears to be new. He also showed a Dorset half-crown of Charles I (Weymouth?).

Mr. H. P. Hall exhibited four very rare aurei of Honorius, Constantine III, and Galla Placidia. He also showed a fine series of gold of the early third century A.D.

DECEMBER 15, 1932.

PERCY H. WEBB, Esq., M.B.E., President, in the Chair.

The Minutes of the last Meeting were read and approved.

Presents to the Society were announced, and thanks ordered to be sent to their donors.

Mr. William Gilbert exhibited an aureus of Macrinus (Cohen 92, wt. 114 gr.) in remarkably fine condition.

Mr. B. A. Seaby showed a sestertius of Plautilla (Cohen 16), *rev.* **PIETAS AVGG.** Pietas I., holding child; only two other sestertii seem to be known, one (Cohen 22) in Paris and the Bachofen von Echt specimen (*rev.* **PROPAGO IMPERI**).

Mr. Garside exhibited the bronze ten and five reis of the Azores 1901, and 1/12th real of Paraguay 1845.

Mr. C. J. Bunn showed a series of German coins and medals of porcelain including a complete set of Saxony (20, 10, 5, 2, and 1 mark, 50 and 20 pfennige).

Mr. H. P. Hall showed an interesting series of coins of the period of Mr. Mattingly's paper.

Mr. Mattingly read a paper on "Aemilian: the year of five Emperors, A.D. 253". Commenting on the obscurity of the period, despite its great historical interest, the reader justified his plan of sketching the course of Roman history for the preceding half century. He showed how, from the accession of Septimius Severus onwards, the instability of the civil power, the increasing pressure on the Danube and Euphrates frontiers, the insubordination of valorous, but undisciplined armies, again and again threw the state into confusion. Coming nearer the time of the paper he showed how the crisis in the Balkans became and remained acute under Trajan Decius, and how Aemilian finally rose to power as representative of the army of Upper Moesia. Some tendencies of the time were illustrated, together with the history, from the coins, and the very difficult problems of chronology were illustrated from the coins both of Rome and Alexandria. Aemilian, it was claimed, was no mere careerist, but a not unworthy forerunner of men like Claudius Gothicus and Aurelian.

In the discussion that followed Sir Charles Oman, Mr. Salisbury, Mr. Haines, and the President took part.

JANUARY 19, 1933.

PERCY H. WEBB, Esq., M.B.E., President, in the Chair.

The Minutes of the last Meeting were read and approved.

Presents to the Society were announced, and thanks ordered to be sent to their donors.

Mr. K. R. R. Readhead was proposed for election as a Fellow of the Society.

The evening was devoted to Exhibitions:

Mr. William Gilbert exhibited four aurei of Domitian. These four aurei each bear a very similar portrait, and the legends on the obverses of nos. 1, 2, and 3 (CAESAR AVG. F DOMITIANVS) are identical. They were struck during the lifetime of his father Vespasian. The first coin, formerly in the cabinet of the Earl of Moray, is a variety

of Cohen 46 in that it reads **CAESAR** in full, but another specimen is in the British Museum and is described by Messrs. Mattingly and Sydenham in their *Roman Imperial Coinage*, Volume II, page 42. The weights of these three coins are, respectively, 112 grains, 112.5 grs., and 113.5 grs., which closely correspond with the weights of gold coins in the owner's collection, in similar condition, of Vespasian and Titus. When, however, we come to no. 4, the scarce coin with the bust of Minerva on the reverse, we find it weighing no less than 119.5 grs. This coin has the obverse legend **IMP CAES. DOMITIANVS AVG. P. M.** and was struck after Domitian became Emperor, which event followed the death of Titus in September A.D. 81. All four coins are of good style and were struck at the Rome mint.

Mr. L. A. Lawrence, F.S.A., showed (1) Newark shilling 1646 struck on a piece of plate which bore the Royal arms stamped (not engraved) on it. Portions of the shield of arms and of the border of the plate are quite clear on the shilling—Dr. Philip Nelson in Vol. II of the *B. N. J.* illustrates a Newark ninepence with the same arms and border in his *Obsidential Money of the Great Rebellion*. Ruding, Vol. III, Pl. 28, also illustrates a ninepence. Mr. Lawrence could not find any present evidence of plate with the arms struck on it. (2) Quinarius of Allectus with the rare obverse of Victory

standing on a galley $\frac{1}{QL}$. (3) A small hoard of Roman denarii and three bracelets found in Spain. The denarii date from 125 B.C. to 23 or 22 B.C. The bracelets are believed to be Roman. The importance of the hoard consists in the ability to date the bracelets. (4) Head of Agrippina the Elder cast from a carved head in chalcedony in the British Museum. The metal was procured from worthless Roman sestertii.

Mr. C. E. Blunt exhibited a Richard II groat and halfpenny with unpublished privy marks, a half-groat of Henry VII, second coinage with **CANTOR** struck over **LONDON**,

and a halfpenny, a mule between Henry IV and V with Roman and English N in LONDON, also a George III halfpenny countermarked K and a coronet.

Mr. Fredk. A. Harrison showed a series of coins of Napoleon I illustrating the changes in his style and title.

Mr. C. J. Bunn showed a solidus of Theodosius and another of Valentinian II.

Mr. Garside exhibited the bronze quarter anna 1908 of Edward VII of Sialana State and another of 1912 of George V.

Mr. Philip Thorburn showed a large silver medal commemorating the declaration of independence by Afghanistan in 1921 and three rare early Omayyad copper coins.

Mr. H. W. Taffs exhibited the following coins: Eadred pennies, *rev.* AETARDES MOT and ERIMES MOT. Henry I penny, Type IX (Hkns. 263), DERMAN. ON. LVND (unpublished moneyer for this type). Henry I penny (Hkns. 255), DEREMAN ON LVII (type for this moneyer is already known). Matilda penny RODBERD DE BR (Bristol, unique). Edward I penny (Durham), for Bishop Beck and Edward II penny of Durham. George III pattern sixpence, 1790, by Droz (*milled* edge, which is unpublished). Gilt proof of Benjamin Nightingale's token 1843. Proof of Benjamin Nightingale's token on thick flan—unique. Victoria, pattern for Decimal coinage, 10 cents—in copper, tin, and silver by Marrian and Gausby.

FEBRUARY 18, 1933.

PERCY H. WEBB, Esq., M.B.E., President, in the Chair.

The Minutes of the last Meeting were read and approved.

Presents to the Society were announced, and thanks ordered to be sent to their Donors.

Mr. K. R. R. Readhead was elected a Fellow of the Society, and Miss. M. C. Wood was proposed for election.

Sir Charles Oman exhibited an aureus of Gallienus, *rev.* **UBIQUE PAX**, a set of his legionary antoniani, a denarius and two quinarii.

Mr. L. A. Lawrence, F.S.A., showed a series of antoniniani of Gallienus in which the *Securitas Aug.* and *Victoria Aug.* of the Roman letter period were contrasted with *Aeternitas* types of the Greek letter period.

Mr. H. P. Hall showed four first brass of Gallienus, one of them with traces of silvering.

Mr. William Gilbert exhibited an aureus of Didia Clara (Cohen 2) and another of Julia Domna (Cohen 193).

Mr. Henry Garside showed a set of coins of Danzig 1932, five and two gulden silver, gulden and half-gulden nickel, 10 and 5 pfennig bronze.

Mr. F. S. Salisbury read a paper entitled "Some Reverse Types of Gallienus".

During the sole principate of Gallienus the Roman mint struck first in six workshops with Latin officinal marks, and later in twelve with Greek letter marks. It was shown that there was a radical change of types between the two periods, many that indicated prosperity, such as *Annona*, *Liberalitas*, and *Laetitia*, being dropped. Special attributions of *Securitas* and *Victoria* to the State, the Orbis, and Augustus, were replaced by the epithet *aeterna*. While many of the attributes of Augustus ceased to be struck, especially *Genius Aug.*, an *Aeternitas Aug.* type was introduced. The meaning of the changes was discussed, and the view favoured that they represented a deliberate turning away from present and temporary failures to the external fortune of Rome. Emphasis was laid on the fact that these reverse types represent divinities conceived of as real personalities, and on the importance of the great mass of contemporary Christian literature as a source of evidence. Finally the series of *Di Conservatores* was described, attention being called to the predominant importance of Diana; the precedence of the Palatine Apollo over Jupiter, who was perhaps only represented in this series by his Cretan type of the goat; the monopoly of Juno, the married goddess, by Salonina, whereas Gallienus alone struck Diana types; and the probable Mithraic allusion in the bull reverse of Sol. The whole series

was regarded as a mass appeal to Olympus, the key to its spirit being given by the Centaur reverses of Apollo, in which the god is summoned as Paeon the Healer, with Cheiron the tutor of Apollo's son, Aesculapius, to come to the aid of a sick world.

MARCH 16, 1933.

PERCY H. WEBB, Esq., M.B.E., President, in the Chair.

The Minutes of the last Meeting were read and approved.

Presents to the Society were announced, and thanks ordered to be sent to their donors.

Miss M. C. Wood was elected a Fellow of the Society, and Mr. W. H. Biddell was proposed for election.

Mr. H. P. Hall exhibited the following aurei of Hadrian :

1. IMP. CAES. HADRIANVS AVG COS III. Laureate bust of Hadrian R.

Rev. ANN. DCCCLXXIIII. NAT. VRB. P. CIR. CON. (874 U.C.). Young man sitting on the ground l., holding a wheel in r. hand, behind him an obelisk.

2. IMP. CAES. TRAIAN HADRIANO OPT. AVG G. D. PART. Laureate bust of Hadrian r.

Rev. DIVO TRAIANO PATRI. AVG. Laureate bust of Trajan r.

3. HADRIANVS. AVG COS III. P.P. Bare head of Hadrian r.

Rev. DIVIS. PARENTIBVS. Busts facing of Trajan and Plotina, in the field above their heads two stars.

and a stater of Philip II.

Mr. F. S. Salisbury exhibited a gold stater attributed to the Marini.

Dr. G. C. Brooke read a paper on the origin and distribution of the early types of Ancient British Coinage.

The Gaulish coins imitating the stater of Philip of Macedon had always been placed at too remote a date in the attempt to find a direct trade route between Macedon and Gaul. The staters of

Macedon, however, became in the first half of the second century B.C. the normal gold currency of Rome; enormous quantities of them came into Rome as a result of the victories of Cynoscephalae, Magnesia, and Pydna, when quantities of them amounting to hundreds of thousands were carried in the triumphal processions. It was from Rome that they found their way into Gaul when the victory of Ahenobarbus in 121 B.C. over the Arvernians opened direct intercourse between Rome and the central tribes of Gaul. The gold coinage of Northern Gaul, which circulated in Britain, cannot therefore be dated much earlier than the end of the first century B.C. The earliest, attributed to the Bellovaci, penetrated deeply along the routes of the traders by the Thames and its tributaries and the coasts of Essex, Kent, and Sussex; it was not imitated locally.

The earliest coinage to be imitated in Britain was that of the Atrebates (if correctly attributed), and it represented the coinage of the settlers of the first Belgic invasion of about 75 B.C. The first British coinages, based upon the Atrebatist staters, circulated both north and south of the Thames, and in the district of Hampshire and Dorset continued as a local currency, debased to silver and copper, down to the end of the first century A.D. There was also copying of the Gaulish coins along the eastern counties, gradually extending northward, until it developed ultimately into the well-known inscribed and uninscribed coins of the Brigantes.

From the early British coinage circulating north of the Thames was originated a type named, after the large hoard found in 1849, the Whaddon Chase type; for the first time the disjointed horse was supplanted by a horse of native workmanship. In its later development this type became the type of the early coinage of Tasciovanus, and the centre of its circulation was in the Verulam-Braughing district. This proved the uninscribed Whaddon Chase type to be the coinage of Cassivellaunus.

A new style of gold coin was imitated later from a coinage doubtfully attributed to the Remi, but certainly of some tribe of Belgic Gaul. This was the type with triple-tailed horse and the wheel, which is found on coins of Commius and Tincommius, and it represents the coinage of the second Belgic invasion which is dated about the middle of the first century B.C.; it is connected with the name of the Gaulish king Commius, who surrendered after long warfare with the Romans and ultimately settled in Britain. In its uninscribed form this coinage extended along the upper valley of the Thames, and at its source was imitated by the

Cotswold tribe of the Dobuni whose coins bear such names as Antedrigus, Comux, Bodvoc, &c.

Commus and his three sons reigned south of the Thames; Tincommius had a coinage circulating on the coast of Sussex Verica's coins too are found in this district where he probably succeeded to his brother's kingdom, and also along the Surrey Hills where his original kingdom probably lay. Eppillus had a coinage in Kent only; Calle on his coins could not be Calleva Atrebatum. (This paper is printed in this volume of the *Numismatic Chronicle*.)

APRIL 20, 1933.

PERCY H. WEBB, Esq., M.B.E., President, in the Chair.

The Minutes of the last Meeting were read and approved.

Presents to the Society were announced, and thanks ordered to be sent to their Donors.

Mr. W. H. Biddell was elected a Fellow of the Society, and Messrs. F. J. Hansen and A. R. Denton were proposed for election.

Mr. William Gilbert showed a very fine and rare aureus of Postumus, *rev.* HERC.DEUSONIENSI, from the Recamier collection (Coh. 90, wt. 100 grs.).

Mr. L. A. Lawrence, F.S.A., showed a series of coins to illustrate the President's paper.

Rev. E. A. Sydenham exhibited a hoard of 204 antoniniani of the period of the paper, found near Mt. Carmel.

Sir Charles Oman showed a rare antoninianus of Postumus (*rev.* Hercules and queen of the Amazons) and a quinarius with heads of Postumus and Hercules, also antoniniani of Victorinus, Tetricus I and II, Laelian, Marius Quietus (AEQUTAS), and Florian.

The President read a paper on "Tyranni"; the Usurpers from the reign of Valerian to that of Diocletian.

Great difficulty arose from the fragmentary and contradictory accounts of the Roman historians, but he thought that, with the assistance of the enormous coinage of the successful Gallic rebellion, it had been possible to deal satisfactorily with the history of

that province during its independence ; but that of Central Europe remained obscure. No central rebel gained any permanent success, and indeed Gallienus, careless and luxurious as he may have been, showed himself able to deal strenuously with any outbreaks which imperilled the centre of his power. It seemed that the key to the difficulty lay in the fact that some writers had erroneously ascribed to Regalian a reign of two or even three years, and that if the evidence of his coinage in favour of a much shorter period of success was accepted, the numerous outbreaks which occurred could be arranged in their probable order.

No rebellion could have broken out while Valerian was crossing Europe on his last journey to Asia, and his march could hardly have taken place later than A.D. 258. Accepting that date the rising of Ingenus in Pannonia and Moesia would have taken place late in that year, which is the date positively given by Pollio. The brutality with which that rebellion was suppressed by the Roman army led to the outbreak of Regalian in 259, and he must in turn have been destroyed before the incursion and defeat of the Macriani in 261. There is reason to suppose that Valens rebelled in Achaia in 260, and that Macrian sent Piso Frugi against him to protect the flank of the advance of the Asiatic army. Frugi turned rebel against his rebel master, who destroyed him, and Valens is said to have been killed by his own men. The Macriani were defeated by an army under Aureolus in 261, and Europe was free from rebellion until 267 when Aureolus himself turned traitor.

In the East, after the defeat of Valerian, the Persians were driven out by Balista (who was not a rebel) with the aid of Odenathus, and the Macriani took up the government with some success. On their destruction, Odenathus and Zenobia obtained recognition from Gallienus and the Senate, and ruled as deputies of Rome, gradually extending their power southwards till it included Egypt. During the period of expansion Gallienus sent armies which dealt with such rebels as Trebellianus in Isauria and Alexander Aemilianus in Egypt, but, from 264 or thereabouts, the Palmyrans seem to have been the only real rulers of the Roman East. During the reign of Claudius and in the early days of Aurelian they always assumed to act under the sanction of Roman Emperors. After the death of Odenathus his wise policy was abandoned and the ambition of Zenobia and Vabalathus soon led to the clash in which the Palmyran family was destroyed.

MAY 18, 1933.

PERCY H. WEBB, Esq., M.B.E., President, in the Chair.

The Minutes of the last Meeting were read and approved.

Presents to the Society were announced, and thanks ordered to be sent to their Donors.

Messrs. Arthur Ridgway Denton and Frants Johan Hansen were elected Fellows of the Society, and Mr. T. W. Armitage was proposed for election.

Messrs. H. Garside and H. W. Taffs were appointed to audit the Society's accounts.

Mr. Henry Garside exhibited the Bulgarian 100, 50, and 20 leva in silver and 10 and 5 leva in nickel, all of 1930.

Mr. William Gilbert showed an aureus of Tetricus I (Cohen 182 *obv.* and 204 *rev.*) in mint condition, wt. 97 grs.

Sir Charles Oman exhibited 13 completely silvered bronze coins from Aurelian to Julian—the earlier obviously being attempts to copy the antoniniani of the earlier third century, but what, he asked, do the Julian's try to represent?

The evening was devoted to the reading of four short papers.

Mr. Mattingly reported briefly on the Selsey Hoard of nearly 1,000 silver coins of the third century, almost all antoniniani, from Elagabalus to Quintillus, and laid stress on the chronological difficulty arising from the finding of coins of Quintillus without any of Tetricus. (This paper is printed in this volume of the *Numismatic Chronicle*.)

Mr. O'Neil briefly described the conditions under which a hoard of solidi and siliquae was made at Terling in the early nineteenth century. A full report of this hoard is published in this volume of the *Numismatic Chronicle*.

Mr. Pearce read a note on the "Aes" types of Theodosius I, their sequence and their bearing on history. He pointed out the special importance of Thessalonica as a meeting-point

of East and West and showed how Theodosius's interference in the West to protect Valentinian II against Maximus is marked by the encroachment of his Eastern type, SALVS REIPVBLICAE, on the Italian mints.

Mr. Salisbury read, as a footnote to his recent paper on coin-types of Gallienus, a short note on types of Claudius showing how the changed temper and policy of the new reign at once found expression on the coins.

JUNE 15, 1933

ANNUAL GENERAL MEETING

PERCY H. WEBB, Esq., M.B.E., President, in the Chair.

The Minutes of the Annual General Meeting of June 1932 were read and approved.

Messrs. B. H. St. John O'Neil and John Walker were appointed scrutineers of the ballot.

Mr. T. W. Armitage was elected a Fellow of the Society.

The following Report of the Council was laid before the Society.

The Council have again the honour to lay before you their Annual Report on the state of the Royal Numismatic Society.

It is with deep regret that they have to announce the death of the following seven Fellows:

C. F. Duncan	Lt.-Col. P. Ramsay Phipps
J. A. Foster	Robert Sutcliffe
J. S. Henderson	Henry Symonds
Lt.-Col. H. W. Morrieson	

They have also to report the resignation of two Fellows:

M. Eustache de Lorey	Henry Longman, Esq.
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In addition, eleven names have been removed from the List of Fellows, under Rule 15.

On the other hand, they have to report the election of the following eight Fellows:

T. W. Armitage, Esq.	K. R. R. Readhead, Esq.
W. H. Biddell, Esq.	Cornelius M. Spink, Esq.
A. R. Denton, Esq.	J. R. Stewart, Esq.
F. J. Hansen, Esq.	Miss Margaret E. Wood

The number of Fellows is therefore:

	Ordinary.	Honorary.	Total.
June, 1932	230	12	242
Since elected	8	—	8
	<hr/> 238	<hr/> 12	<hr/> 250
Deceased	7	—	7
Resigned	2	—	2
Removed	11	—	11
	<hr/> 218	<hr/> 12	<hr/> 230

The Council have also to report that they have awarded the Society's Medal to Dr. Kurt Regling, Director of the Coin Cabinet of the Kaiser Friedrich Museum, and Honorary Professor of Numismatics in the University of Berlin, in recognition of his work on ancient, especially Greek, coins.

The Treasurer's Report, which follows, was then laid before the Meeting.

STATEMENT OF RECEIPTS AND DISBURSE-

YEAR ENDING

187.

G. C. HAINES, HON. TREASURER,

	£	s.	d.
To cost of Numismatic Chronicles	439	15	0
„ Rent of Rooms	50	0	0
„ Insurance	3	15	0
„ Bookbinding	3	12	10
„ Lantern Expenses	11	18	0
„ Gas and Water	6	9	
„ Refreshments, &c.	5	0	5
„ Printing, Postage, and Stationery	13	2	0
„ Sundries	6	5	0
„ Research, Copies of Documents	10	0	
	£534	5	0
„ Balance at Bank 31.5.33 carried forward— £		s.	d.
General Account	290	13	9
Research Account	4	0	0
	204	13	9
	£738	18	9

MENTS OF THE ROYAL NUMISMATIC SOCIETY

MAY 31ST, 1933.

IN ACCOUNT WITH THE SOCIETY.

Cr.

	£	s.	d.	£	s.	d.
<i>By Balance at Bank 1. 6. 32 brought forward—</i>						
General Account	206	8	7			
Research Account	4	6	0			
				210	14	7
„ Entrance Fees	6	6	0			
„ Life Membership Fee	31	10	0			
„ Subscriptions	296	18	10			
				334	14	10
„ Sales of Chronicles				143	5	0
„ Dividends and Interest						
£200 5% Conversion Stock 1944-64 (N.B. Market price 115 = £230 0s. 0d.)	10	0	0			
£942 London, Midland and Scottish Railway, 4% Preference Stock (N.B. Market price 40 = £376 16s. 0d.)	28	5	3			
	38	5	3			
Less Income Tax deducted	9	11	4			
				28	13	11
„ Income Tax Recovered						
2 years ending 5th April, 1932				21	10	5
				£738	18	9

G. C. HAINES, *Hon. Treasurer.*

Audited and found correct,

HENRY GARSIDE, }
H. W. TAFFS, } *Hon. Auditors.*

June 14, 1933.

The Reports of the Secretary and Treasurer were adopted on the motion of the President.

The President then handed the Society's Medal to Mr. Allan, and said:

It is my pleasant duty to present the medal of this Society, granted for eminent services to numismatics, to a man whose fame is widespread, namely to Dr. Kurt Regling. He is, as you know, the Director of the Coin Cabinet in the Kaiser Friedrich Museum and Honorary Professor of Numismatics in the University of Berlin, and has devoted his life to the study of ancient coins and Renaissance Medals. In these fields his industry has been unflagging, and his numerous contributions to learning have been of the greatest value. In his first important work, his monograph on the coinage of Terina, he introduced a revolution in the study of Greek coins and indeed of numismatics generally. For this is the first work, so far as I am aware, in which the linking of obverse with reverse dies and the observation of their progressive deterioration is used to establish the sequence of the issues. The importance of this step, which provides a method almost independent of the personal equation, can hardly be exaggerated. His next work was the Catalogue of the famous Warren Collection, formed by our former Fellow Canon Greenwell and subsequently acquired by the late E. P. Warren, and now in Boston. To the great Berlin Corpus of Ancient Coins of Northern Greece he contributed the volume on the coins of Tomis and Odessus in conjunction with our honorary Fellow Dr. Pick. In 1924 he published his important *Die antike Münze als Kunstwerk*, dealing with Greek and Roman coins from the artistic point of view. *Die Münzen von Priene* is an exhaustive account of coins found in the German excavation of Priene, and, together with a Corpus of the coins of that city, appeared in 1927. He has also contributed numerous articles and reviews to German numismatic and archaeological periodicals and encyclopaedias. Among the former may be mentioned his accounts of the finds of Karnak, Frondenburg, Dortmund,

Prinkipo, and Babylon, articles on the coins of Mende and Amphipolis and the Syracusan decadrachms by Kimon, and on the art of Byzantine coins, an almost virgin field. Special mention must be made of his invaluable summary of ancient "Münzkunde" contributed to the Gercke-Norden encyclopaedia of classical antiquities. In the field of Renaissance Medals, in addition to preparing the handsome catalogue of the Lanna Collection, he has contributed articles to the *Ämtliche Berichte* of the Berlin Museum, the *Archiv für Medaillenkunde*, and other periodicals. We should have been glad to make the presentation personally had it been possible for Dr. Regling to be with us to-night.

Mr. Allan accepted the medal on behalf of Dr. Regling and read the following translation of a letter of thanks from him:

Dear Mr. Allan,

I offer my heartiest thanks to you for your kind letter of May 30, announcing the award of the medal of the Royal Numismatic Society to me, and to the Society for doing so. I accept it with great pleasure and feel all the more honoured by the award as I am the first German to receive it since the war. The Royal Numismatic Society by publishing for nearly a century the fine series of the *Numismatic Chronicle*, which has always contained distinguished contributions to the study of Greek and Roman coins, and on the medals of the Renaissance, which have been my specialities, has earned imperishable merit which qualifies and entitles it to confer the highest numismatic distinction, the "blue ribbon" of numismatics as Miss Farquhar called it two years ago. I regret very much that I cannot be present at the Annual Meeting.

Yours very sincerely

Kurt Regling.

Charlottenburg
Saarezstr. 22.

2/6/33

The President then delivered the following address:

PRESIDENTIAL ADDRESS.

You have heard the reports of the Hon. Secretary and the Hon. Treasurer. The situation of the Society is on the whole satisfactory, but I appeal to our Fellows to use every endeavour to keep up our numbers.

This year we have to mourn very serious losses through death.

Mr. C. F. Duncan was elected to the Society in 1928 and was a regular attendant at the Society's meetings.

Mr. H. M. Lund of New Zealand was one of our few Fellows from the Antipodes. He was elected forty years ago. Of Scandinavian origin, he specialized in the coins of Denmark, of which he had a good collection. He took an active part in the formation of the New Zealand Numismatic Society. Personally I shall miss him much, for he has for many years been my very pleasant correspondent on numismatic subjects, and he was well acquainted with the New Zealand branch of my family.

Mr. J. S. Henderson was one of our older Fellows, having been elected in 1886. He had a fine collection of coins, medals, books, and medieval antiquities, all of which he left to the Fitzwilliam Museum, Cambridge.

Mr. Robert Sutcliffe was elected in 1910, soon after his interest had been attracted from English Colonial, in which he had previously specialized, to Indian coins. He rapidly formed a very fine collection of coins of India, Hindu and Muslim, probably the finest ever collected in this country. His Kashmir and Sikh collections were especially noteworthy, while his Kushan gold and Moghul series were also very fine.

Lt.-Col. P. Ramsay Phipps, who was elected in 1917, was not primarily a collector. In the course of his military career in Egypt and the Sudan he acquired an interest in the coins of those lands and did a great deal for the Khartum Museum, to which he handed over all he acquired.

Mr. Henry Symonds, a Member of the Bar, was elected so long ago as 1885, and while in London was a pleasant

and frequent attendant at our meetings. He communicated to the Society many papers embodying the results of his researches at the Record Office and elsewhere into the history of the English Mint in the fifteenth, sixteenth, and seventeenth centuries. He was awarded the Society's Medal in 1924.

I have also to record the loss of Mr. J. A. Foster who was a Life Fellow of the Society, to which he was elected in 1894.

Lt.-Col. H. W. Morrieson was very well known here; his wisdom, willingness to help, and kindly courtesy endeared him to all of us. Elected over fifty years ago in 1882, he had specialized all his life in the coinage of Elizabeth, James I, and Charles I. He had a very remarkable collection of coins of Charles I on which he published many papers, here and in the *British Numismatic Journal*. He was Vice-President of this Society and had held the Presidency of the British Numismatic Society for more than one term of office. He received the medal of that Society in 1920.

I turn from these grave remembrances to a recent event in which we all rejoice. As you know, our very learned Vice-President, the Director of the British Museum, has been created a K.C.B. by His Majesty, and, in offering Sir George Hill our warmest congratulations on a very well-earned honour, we may feel as numismatists, that, some scintilla of reflected glory shines on us.

The years glide on, and I have once more to lay before you a record of the work of our Society during the session which ends to-day.

If I cannot claim that it comprises epoch-making discoveries, it certainly evidences much patient labour and a steady accumulation and application of knowledge. I have not the unpleasant duty of criticizing any unsound work. Both in our own publication and elsewhere our Fellows have done yeoman service to our Science. Their researches penetrate year by year more deeply into our subject, and disclose to us more and more of the informa-

tion and interest which has hitherto lain hidden in the coins.

Mr. E. S. G. Robinson has taken up the pen which has perforce fallen from the busy hand of Sir George Hill, and continues the accounts of the Greek coins recently acquired by the British Museum which have for many years been so valuable a feature of our Chronicle. The year 1930-1 has been marked by the acquisition of a considerable number of coins from the collections of the Dean of Bocking, Dr. D. A. Coles, the Delta hoard (which we have already considered), and other recent finds, some of which are very rare, while others are principally valuable in that they fill gaps in the National Collection. The plate allotted to the paper depicts some noteworthy and beautiful pieces. A Byzantine coin, which Mr. Robinson considers to be a didrachm of the cistophoric standard, struck late in the second century B.C., satisfies both these epithets. Another fine piece, a drachm of Thessaly, is curious in that it shows quite clearly a pellet, which on other specimens is so uncertain in shape that it has been taken to be a flaw in the die. The letters MNAS have been roughly scratched on this coin by some ancient possessor. A pleasing Cretan coin is not extremely rare, but its complete inscriptions and type add to our knowledge of the series of Aptera. A stater of Ionia, perhaps of Samos, gives important evidence, which, it seems, must lead to the revision of the attribution to Phygela by Regling and Jameson of a very similar stater which was in the collection of the latter.

We are indebted to Mr. Mattingly for an important paper on the coinage of Septimius Severus and his family, whose period marks a definite step in the progress of Rome towards her ultimate destination. The observer of that day may well have read in the great power and success of the emperor predictions of a future for the empire even greater than its past, but in fact the new subservience of civil to military power introduced the poison which was to lead to its dissolution. In the matter of coinage our author traces the commencement of an alteration which was inevitable and

beneficial—that of the establishment of a series of mints to bear, in unison with that of Rome, the increasing burden of the imperial coinage. Debasement of the currency had already set in, and the number of coins needed by the empire must have been enormous. Indeed, we may wonder that the change was not made even earlier. The business of the provision of money is always conservative and its commencement, and almost every marked development of it, took place later than we, who look back over history, would expect it.

The war against Pescennius Niger necessitated the issue of coins in the east by both contestants. Mr. Mattingly adopts Signor Laffranchi's attribution of the first mint of Severus to Alexandria, and the coins which he illustrates support this conclusion. He also distinguishes the work of two other early mints, both eastern, of which the site is uncertain, and I think one may trace differences which support the view that there were three sources of the early coins of this emperor. Mr. Mattingly is always a careful student of portrait and type—in this case I commend you also to careful study of the lettering which, I venture to think, materially helps to prove his case. Niger was using Antioch, and it is probable that one of the three mints of Severus was at Laodicea, which city was for a time the seat of the emperor's eastern government in the place of Antioch. Though at first merely one of several local mints, Laodicea presently altered its style, and stands out as a definite provincial branch of the Imperial mint, a forerunner of the system of branch establishments, commenced before, but expanded by, Gallienus, and perfected by Diocletian. A remarkable instance of the connexion between the central mint and the branches can be traced somewhat later in the gradual spreading of the reformed type of the coinage of Aurelian from Rome through Ticinum, Siscia and Cyzicus to Antioch, to the new mint of Tripolis, and, after the defeat of Tetricus, into Gaul.

Mr. Mattingly gives us a working arrangement of the whole of the coinages of the emperor and his family, which,

he points out, are not without some artistic merit, notwithstanding the reduction of the size of, especially, the denarii, and the falling off of the alloy. Severus was a grim old ruler, but Julia Domna must in her youth have been a charming woman: her coins also stamp her as capable. The coinage of Plautilla makes a very pretty series. The portraits of both Caracalla and Geta pass perhaps too rapidly from boyhood to middle age. The writer may be complimented on the great amount of valuable detail which he has compressed into so few pages.

In a subsequent paper on Aemilian Mr. Mattingly briefly traced the events that led to the troubles in A.D. 253, and at our May Meeting he read us a short paper on a hoard found at Selsey which ended with coins of Claudius Gothicus, Quintillus, and Victorinus, but contained none of Tetricus. By this fact he was led to question whether the accession of Tetricus is not generally dated too early. There are more than twenty recorded finds which have terminated in the same way, and in a further forty cases the last coin was of Claudius. I venture to think that they do not invalidate the now accepted assumption that the reign of the Tetrici commenced at some date in A.D. 270. Claudius died in April of that year, and the reign of Quintillus was very short. History gives him but seventeen days, but his coins show that his reign must have lasted for some months, and, seeing in how many mints they were struck, I think that the opposition of Aurelian cannot have arisen at once. Still, if we give him three months, that only carries us into the summer, and there may have been personal and local reasons which we do not now appreciate, why the owner of the hoard may not have possessed later Gallic coins.

Mr. Salisbury's paper on some Reverse Types of Gallienus was very pleasant and scholarly. It arose out of his examination of a find of over 3,400 coins in Wiltshire, which comprised a large number of specimens of the sole reign coinage of Gallienus from the Mint of Rome, and it tends to carry us into the field of knowledge which lies behind that mere enumeration of inscriptions and types which

absorbs the labour and time of many of us. I venture to think that such work as his forms the real justification for the expenditure of that labour and time.

In concluding his paper Mr. Salisbury deplotes that "we know so little of the background of contemporary thought", but indeed his results give us some insight into that background—the romance of numismatics. The more closely we study the details of the monetary issues of the empire, the more impressed we become with the belief that the Romans were a hard-headed nation of business men who, even in a time of sore national trouble, did nothing without reason. The reason for each measure is there, though it is sometimes difficult for us to appreciate it.

Mr. Salisbury compares the types issued by the mint during the days when it was divided into six officinae and used Latin mint-marks, with those used after its expansion to twelve officinae, using the Greek marks, which from that time were much favoured at Rome. He shows that there was a method in the allocation of types to officinae, though it may not yet be possible fully to appreciate what lay behind it. He also makes it appear very clearly that a spirit of despondency increased as the unhappy reign of Gallienus dragged on. Personal and individual, and, still more, victorious types, gave way to more general and precatory ones. The cry of the state rose *de profundis* for pity and help in evil days, and culminated in the immense number of coins dedicated to the *dei conservatores* which certainly form the bulk of the last issues of the reign. Partly the change arose, one may think, from the unhappy mind of the emperor, worn out by national and family troubles and weakened by self-indulgence, but it is curious to note that the actual conditions of the empire were not at their worst during his last years. The formidable rebels who had attacked the state had been destroyed, and even the frontier fighting with the barbarians was not exceptionally severe or unsuccessful. The depth had been reached, and improvement, though invisible perhaps to Gallienus, was commencing.

In his short supplemental paper read in May, Mr. Salisbury depicted the entire change which came over the types employed on the coins, but not, alas, in the fineness of their execution, directly Claudius ascended the throne. The new emperor, though beset with trouble in every direction, threw off at once the depression which had burdened his predecessor, and reflected in these new types the courage which he showed in the exercise of his imperial power. There was an entire change in reverse types and a reversion to the older and braver ones, the only exception being that a few of the *dei conservatores* reverses remained in use; perhaps as the earliest coins of the reign; perhaps through the use of old dies.

The paper is to be commended, not only for its own interest, but as an example of what knowledge may arise from future progress along the line of research that the author has indicated.

Mr. J. W. E. Pearce contributed to us an important paper on the siliquae of the late fourth century and followed it up by a short paper on the Theodosian small bronze coinage bearing the Victory types. He seems to be deriving important information as to the dynastic policy of Theodosius from them, from a detailed study of the reverse types.

We have also read in another place some of the results of the careful and detailed study which the author has given, and is still giving, to this period which, owing to its superficial dullness and the lack of variety in an inartistic series, had been much neglected by British numismatists. We are now learning, most of us for the first time, what a wealth of interest, and what assistance to history, these coins do, in fact, comprise. Mr. Pearce is doing a most valuable work.

Your President dealt with the "Tyranni", the usurpers of the latter part of the third century. He thought that the voluminous coinage of Gaul went far to correct the errors of the historians, and to tell the tale of the Gallic Empire clearly; that the key to the arrangement of the revolts in central Europe was to be found in the fact that

the reign of Regalian was quite short, and not one of two or more years as some thought; and that the eastern troubles grouped themselves round the history of the house of Palmyra, which might have retained power had Zenobia been content, after the death of Odenathus, to continue his cautious policy of assuming to act as deputy or colleague of the Roman emperor. The vaulting ambition of Zenobia and Vabalathus brought about their destruction.

Mr. O'Neil read a note on a find of coins at Terling in Essex so long ago as 1824 which, by the kindness of Lord Rayleigh, on whose estate the hoard was discovered, was recently placed in his hands for examination. Of this find we shall learn more.

The Society dealt largely with the coinage of Rome, but that of Britain was not neglected.

Dr. Brooke read a paper on the origin and distribution of the early types of ancient British coinage which conflicted, I think effectively, with the preconceived beliefs of many of us as to these pieces. I for my part had thought that the stater of Philip of Macedon which was the inspiration of the British coins had arrived here not long after its issue, in the ordinary course of commerce, probably by the trade route across central Europe. Dr. Brooke points out that as the result of the victories of Cynoscephalae, Magnesia, and Pydna the Roman money market was flooded after the triumphs of 194, 188, and 167 B.C. by hundreds of thousands of these staters, and that the victory of Ahenobarbus over the Arvernians in 121 B.C. led to the introduction of these coins to the markets of central Gaul. The debasement of the beautiful Greek original to the disjointed lines and circles of the British staters largely took place, he thinks, among the Gaulish tribes, and not in Britain, and he considers it probable that the earliest British issues were the result of the first Belgic invasion of 75 B.C. On some later British staters there is considerable improvement in style and a definite figure of a horse reappears. The author exhibited a graphic series of slides on which he showed the distribution of the various types throughout southern, eastern, and

central Britain, and his paper evoked a most interesting discussion in which we had the advantage of the participation of Messrs. C. Thurlow Leeds, J. P. Bushe-Fox, Christopher Hawkes, and Mrs. Wheeler, all notable experts on the period.

Mr. L. A. Lawrence continued his account of the coinage of Edward III, the earlier part whereof appeared in 1929. The present paper commences with the reorganization, or, one should perhaps say, reform, which took place in 1351, and carries the history of the coinage down to the Treaty of Brétigni of 1360, and to the transition coins which followed it, probably in 1361, and omitted the King's French title. Complete descriptions of the coins and the variations which may be the privy marks, are given, and they are arranged in groups provisionally dated on what the author calls a reasonable working hypothesis. The detail on which this arrangement is based is so fully and meticulously given that we may believe that hypothesis to be correct. The paper fills over eighty pages of the *Chronicle* and is illustrated by six excellent plates. So a further section of this long reign is adequately covered.

The Rev. Arnold Mallinson diversified an evening otherwise devoted to exhibitions by reading a note on an unpublished rose-marked sovereign of Queen Elizabeth now in the Ashmolean Collection. I hope we shall hear him on other subjects in the future. There must also be many other coins in the Ashmolean Museum which might advantageously be noted.

Mr. W. C. Wells published the results of his investigation of the Pipe Rolls with regard to the silver mine of Carreghova near Oswestry, and the castle erected there by the rebel Earl Robert de Belesme in 1101 and, on his banishment, acquired by Henry II. The English maintained a garrison for the protection of the frontier but the Welsh "wasted it" in 1163. In the next year it was recovered, and we afterwards find it in the hands of Welsh princes allied to England, and then again in English custody. In 1194 Archbishop Hubert Walter required money in con-

nexion with the payment of the ransom of Richard I, and resort was had to a mine near the castle, which had been worked by the Romans, though perhaps not for silver.

The ore produced was taken to Shrewsbury for mintage, but the mine soon proved to be a failure, and Mr. Wells considers that all the short-cross coins of Shrewsbury were issued in 1194 and in 1195. Our author then diverges to consider the troubles of Bishop Pudsey and the Durham mint, and though he subsequently returns to the short further history of the castle, which was probably destroyed in 1226, he finds no trace of further mining operations.

Miss Farquhar's important paper on Thomas Simon, which we discussed a year ago, has since appeared in print with useful additions.

We have had somewhat unusually full discussions on papers read, and a special feature of the session has been the number, interest, and beauty of the coins exhibited to us by Sir Charles Oman, Messrs. Hall, Gilbert, Lawrence, Sydenham, Taffs, Garside, Bunn, and many other Fellows.

Publications during the year by Fellows of the Society elsewhere than in our Chronicle have been numerous and important. His Majesty the King of Italy has issued the thirteenth volume of his monumental *Corpus Nummorum Italicorum*. The British Museum has issued a most important Guide to the principal coins of the Greeks, based on the work of the late Dr. Barclay Head and revised and brought up to date by Sir George Hill, while still Keeper of the Coins in the Museum, assisted by Mr. Stanley Robinson. Mr. Hugh Goodacre has published the last part of his excellent Handbook of the Byzantine coinage, a work which has filled a gap which inconvenienced many of us years ago, and led to the neglect of a coinage which, if not beautiful, is yet full of historic interest.

Mr. Pearce's corpus of the preceding period is unrolling itself and justifies the encomiums which I have already passed upon his work. Mr. Garside still keeps up his record of modern issues which will be of great value hereafter. Oh that he had had a predecessor at the court of the

emperor Aurelian ! The late Sir John Bucknill's corpus of the coinage of the Dutch East Indies has introduced us to a branch of numismatics which was practically unknown to us.

The Dean of Bocking has published his corpus of the copper coinage of Thessaly, a very useful work, and Mr. Charles Seltman has added to Messrs. Methuen's Handbooks one on Greek coins, which takes its worthy stand by its predecessors, Mattingly on Roman coins and Brooke on English coins. It is highly readable, well indexed, and provided with delightful plates—I take it that it completes Messrs. Methuen's books on coins. I must not forget to mention Dr. Milne's excellent work on the coinage of Alexandria.

I think that I have laid before you a record of wide and solid progress of which the Society and its Fellows may be reasonably proud, and may claim that the year has been a very fruitful one.

On the continent M. Jean Babelon has published the second part of the fourth volume of the *Traité des monnaies grecques et romaines*; the great work commenced by his father M. Ernest Babelon, whose death in 1923 was a source of much regret to those of us who knew him and respected his great ability, his courtesy and willingness to help others. His son's preface to the new volume is pleasant to read.

Our Austrian and German colleagues have been busy, but mostly on detailed studies, many of which have been or will be reviewed in our *Chronicle* but I think that the palm for numismatic production rests this year with our own country.

To one continental publication I should like specially to refer for personal reasons. Dr. S. Bolin of Lund has issued a valuable little work, *Die Chronologie der gallischen Kaiser*, which is of particular interest to me because I have had to deal with that subject for the purpose of Part II of Vol. V of the Roman Imperial Coinage. Unfortunately for me my pages were in type before Dr. Bolin's work appeared, and I opened it in some anxiety lest I should find

other conclusions than my own set forth. I am gratified to see that the author's careful study both of the available history of the period and its much more reliable coins has led him to practically the same views as mine.

I have once more to conclude my remarks with a very warm expression to you all of my thanks for your continued kindness to me, and to tender the thanks of all of us to our excellent Hon. Secretaries, Hon. Treasurer, Hon. Editors, Hon. Librarian, Auditors, and Scrutineers.

The Rev. E. A. Sydenham proposed a vote of thanks to the President for his address. The President then announced the result of the ballot for office-bearers for 1933-4 as follows:

President.

PERCY H. WEBB, Esq., M.B.E.

Vice-Presidents.

V. B. CROWTHER-BEYNON, Esq., M.B.E., M.A., F.S.A.

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FREDERICK A. HARRISON, Esq., F.Z.S.

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C. E. BLUNT, Esq.

LADY EVANS, M.A. (Oxon. and Dubl.).

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WILLIAM GILBERT, Esq., M.S.A.

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E. S. G. ROBINSON, Esq., M.A., F.S.A.

H. W. TAFFS, Esq., M.B.E.

H. NELSON WRIGHT, Esq., I.C.S. (Retd.).

After proposing a vote of thanks to the Scrutineers and Auditors, Secretaries and Treasurer, the President adjourned the meetings of the Society till October 19.

At 7.30, the Fellows of the Society dined together in the Connaught Rooms with the President in the Chair. The toast of the Royal Numismatic Society was proposed by Mr. F. S. Salisbury, and acknowledged by the President.